Canon

PowerShot A2100 IS

Camera User Guide

ENGLISH

- Make sure you read this guide before using the camera.
- Store this guide safely so that you can use it in the future.

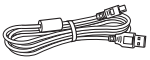
Checking the Package Contents

Check if the following items are included in your camera package. If anything is missing, contact the retailer from which you purchased the camera.

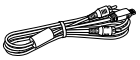
Camera

AA-size Alkaline Batteries (x2)

Memory Card



Interface Cable IFC-400PCU



AV Cable AVC-DC400

Wrist Strap WS-800

Getting Started

DIGITAL CAMERA Solution Disk

Warranty System Booklet

Also refer to the PDF manuals on the CD-ROM.

After installation, shortcut icons appear on the desktop. If the software installation fails, you can find the manuals in the Readme folder on the CD-ROM.

- **Camera User Guide (This Guide)**
  Once you have mastered the basics, use the camera's many features to shoot more challenging photos.
- **Personal Printing Guide**
  Read when you want to connect the camera to a printer and print.
- **Software Starter Guide**
  Read when you want to connect the camera to a computer. Explains how to install and use the software on the DIGITAL CAMERA Solution Disk.

- You can use the included memory card to try out your new camera and take some test shots.
- Adobe Reader is required to view the PDF manuals.

Test Shots

Take some initial test shots and play them back to make sure the images were recorded correctly. Please note that Canon Inc., its subsidiaries and affiliates, and its distributors are not liable for any consequential damages arising from any malfunction of a camera or accessory, including memory cards, that results in the failure of an image to be recorded or to be recorded in a way that is machine readable.

Warning Against Copyright Infringement

The images recorded with this camera are intended for personal use. Do not record images that infringe upon copyright laws without the prior permission of the copyright holder. Please be advised that in certain cases the copying of images from performances, exhibitions, or commercial properties by means of a camera or other device may contravene copyright or other legal rights even if the image was shot for personal use.

Warranty Limitations

For information on your camera's warranty, please refer to the Canon Warranty System Booklet supplied with your camera.
For Canon Customer Support contacts, please see the rear of the Warranty System Booklet.

LCD Monitor

The LCD monitor is produced with extremely high-precision manufacturing techniques. More than 99.99% of the pixels operate to specification, but occasionally non-performing pixels may appear as bright or dark dots. This is not a malfunction and has no effect on the recorded image.

Camera Body Temperature

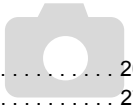
Please take care when operating the camera for an extended period as the camera body may become warm. This is not a malfunction.

Memory Cards

The various types of memory cards that can be used in this camera are collectively referred to as memory cards in this guide.

What Do You Want to Do?

Shoot



- Shoot, leaving it to the camera to make settings 20
- Easy Shooting (Easy Mode) 27
- Shoot to match special conditions. . . . . 52 – 55

Take good people shots

Portraits (p. 52)

With nightscapes (p. 52)

Kids and pets (p. 52)

At the beach (p. 54)

With snowscapes (p. 55)

Take good landscapes

Landscapes (p. 52)

Sunsets (p. 54)

Nightscapes (p. 54)

Foliage (p. 55)

Shoot various other scenes

Indoors (p. 53)

Fireworks (p. 54)

Aquarium (p. 54)

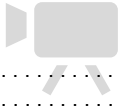
Low light (p. 55)

- Focus on faces 20, 61, 76, 79
- Shoot in places where I cannot use the flash (turn off the flash) 56
- Shoot pictures with me in them too (self-timer). 60, 61
- Insert the date and time into my shots 57
- Take close-up pictures of subjects (macro shooting) 65
- Take sepia toned or black and white pictures. 71
- Change the size of picture I want to take (recording pixels). 66
- Take pictures continuously 68
- Shoot without the effects of camera shake (image stabilization) . . 111
- Shoot without the effects of camera shake even in low light conditions (High ISO Auto) 55, 69
- Make dark subjects appear brighter (i-Contrast). 82

View

- Look at my pictures 23
- Easy Playback (Easy Mode) 28
- Automatically play back pictures (slideshow) 92
- Look at my pictures on a TV 95
- Quickly search pictures 90, 91
- Erase pictures 24, 28, 97
- Protect pictures from accidental erasure 96

Shoot/View Movies

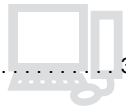


- Shoot movies 29
- View movies 31

Print

- Easily print pictures 25

Save



- Save images to a computer 32

Other

- Turn off sounds 47
- Use the camera abroad 38

Table of Contents

Chapters 1 – 3 explain the basic operations and frequently used functions of this camera. Chapters 4 onward explain the advanced functions, letting you learn more as you read each chapter.

Checking the Package Contents 2
Read This First 3
What Do You Want to Do? 4
Safety Precautions.....8

1 Getting Started 11

Inserting the Batteries and Memory Card 12
Setting the Date and Time 16
Setting the Display Language 18
Pressing the Shutter Button 19
AUTO Taking Pictures 20
Viewing Images 23
Erasing Images 24
Printing Images 25
Shooting in Easy Mode 27
Easy Playback/Erasing 28
Shooting Movies 29
Viewing Movies 31
Transferring Images to a Computer 32
Accessories 36
Separately Sold Accessories 38

2 Learning More.....39

Components Guide 40
Power Saving Function (Auto Power Down).....41
Information Displayed on the Screen 42
Indicator 44
FUNC. FUNC. Menu – Basic Operations 45
MENU Menu – Basic Operations 46
Changing the Sound Settings 47
Returning the Camera to Default Settings 48
Formatting Memory Cards 49
Changing the Screen Brightness 50

3 Shooting in Special Conditions and Commonly Used Functions..... 51

Shooting in Various Conditions 52
SCN Shooting in Special Conditions 53
Turning the Flash Off..... 56
Inserting the Date and Time..... 57
Zooming in More Closely on Subjects (Digital Zoom)..... 58
Using the Self-Timer..... 60
Using the Face Self-Timer..... 61

4 Selecting Settings Yourself 63

P Shooting in Program AE 64
Turning the Flash On..... 64
Shooting Close-ups (Macro)..... 65
Shooting Far Away Subjects (Infinity) 65
Changing the Recording Pixels (Image Size)..... 66
Changing the Image Quality (Compression Ratio) 66
Adjusting the Brightness (Exposure Compensation) 68
Continuous Shooting 68

ISO Changing the ISO Speed 69
Adjusting the White Balance 70
Changing the Tone of an Image (My Colors) 71
Shooting Using a TV Monitor 72
Shooting Using the Two Second Self-Timer 72
Customizing the Self-Timer 73
Changing the Composition with the Focus Lock 74

5 Getting More Out of Your Camera 75

Changing the AF Frame Mode 76
AFL Shooting with the AF Lock 77
Magnifying the Focal Point 78
Selecting the Person to Focus On (Face Select) 79
Changing the Metering Mode 80
AEL Shooting with the AE Lock 80
FEL Shooting with the FE Lock 81
Shooting with Slow Synchro 81
Making Dark Subjects Appear Brighter (i-Contrast) 82
Red-Eye Correction 83
Shooting Long Exposures 84

6 Using Various Functions for Shooting Movies 85

Changing the Image Quality 86
AE Lock/Exposure Shift 87
Other Shooting Functions 87
Playback Functions 88

7 Using Playback and Other Functions 89

Searching Images by Sets of 9 (Index Display) 90
Searching for Images Using the Jump Display 91
Viewing Slideshows 92
Checking the Focus 93
Magnifying Images 94
Changing Image Transitions 94
Viewing Images on a TV 95
Protecting Images 96
Erasing All Images 97
Rotating Images 97
Resizing Images 98
Making Dark Subjects Appear Brighter (i-Contrast) 99
Correcting the Red-Eye Effect 100
Printing from the Print List (DPOF) 101
Selecting Images for Printing (DPOF) 102

8 Customizing the Camera .. 105

Changing Functions 106
Changing Shooting Functions 109
Changing Playback Functions 112

9 Useful Information 113

Using Household Power 114
Troubleshooting 115
List of Messages that Appear on the Screen 118
Functions Available in Each Shooting Mode 120
Menus 122
Handling Precautions 125
Specifications 126
Index 128

Safety Precautions

- Before using the camera, please ensure that you read the safety precautions described below. Always ensure that the camera is operated correctly.
- The safety precautions noted on the following pages are intended to prevent injuries to yourself and other persons, or damage to the equipment.
- Be sure to also check the guides included with any separately sold accessories you use.

⚠ **Warning** Denotes the possibility of serious injury or death.

⚠ **Caution** Denotes the possibility of injury.

Caution Denotes the possibility of damage to the equipment.

⚠ Warning

Camera

- **Do not trigger the flash in close proximity to human eyes.**
  Exposure to the intense light produced by the flash could damage eyesight. In particular, remain at least one meter (39 inches) away from infants when using the flash.
- **Store this equipment out of the reach of children and infants.**
  Strap: Putting the strap around a child's neck could result in asphyxiation.
  Memory card, day/date battery: Dangerous if accidentally swallowed. If this occurs, contact a doctor immediately.
- **Do not attempt to disassemble or alter any part of the equipment that is not expressly described in this guide.**
- **To avoid the risk of injury, do not touch the interior of the camera if it has been dropped or otherwise damaged.**
- **Stop operating the camera immediately if it emits smoke, a strange smell, or otherwise behaves abnormally.**
- **Do not use organic solvents such as alcohol, benzine, or thinner to clean the equipment.**
- **Do not allow liquids or foreign objects to enter the camera.**
  This could result in fire or electrical shock.
  If liquid or foreign objects come into contact with the camera interior, immediately turn the camera power off and remove the batteries.
- **Use only recommended power sources.**
  Using other power sources could result in fire or electrical shock.

Battery

- **Use only recommended batteries.**
- **Do not place the batteries near or in direct flame.**
- **Do not let the batteries come into contact with water (e.g. sea water) or other liquids.**
- **Do not attempt to disassemble, alter or apply heat to the batteries.**
- **Avoid dropping or subjecting the batteries to severe impacts.**
  This may cause explosions or leaks, resulting in fire, injury and damage to the surroundings. In the event that a battery leaks and the eyes, mouth, skin or clothing contacts these substances, immediately flush with water and seek medical assistance.

Other Warnings

- **Do not play the supplied CD-ROM(s) in any CD player that does not support data CD-ROMs.**
  Playing the CD-ROM(s) in an audio CD player (music player) could damage the speakers. It is also possible to suffer hearing loss from listening with headphones to the loud sounds of a CD-ROM played on a music CD player.

⚠ Caution

- **Be careful not to bang the camera or subject it to strong impacts or shocks when hanging it by the strap.**
- **Be careful not to bump or push strongly on the lens.**
  This could damage the camera or lead to injury.
- **Avoid using, placing or storing the camera in the following places.**
  - Places subject to strong sunlight.
  - Places subject to temperatures above 40 °C (104 °F).
  - Humid or dusty areas.

  These could cause leakage, overheating or an explosion of the batteries, resulting in electrical shock, fire, burns or other injuries. High temperatures may also cause deformation of the casing.

Caution

- **Do not aim the camera at bright light sources (the sun, etc.).**
  Doing so may cause malfunctions or damage the image sensor.
- **When using the camera on a beach or at a windy location, be careful not to allow dust or sand to enter the camera.**

- **Do not use the flash with dirt, dust or other items stuck to the surface, or if it is covered by your fingers or clothing.**
  This may cause the camera to malfunction.
- **Remove and store the batteries when you are not using the camera.**
  If the batteries are left inside the camera, damage caused by leakage may occur.
- **Before you discard batteries, cover the terminals with tape or other insulators.**
  Contacting other metal materials in waste containers may lead to fire or explosions.
- **Do not sit in a chair with the camera in your pocket.**
  Doing so may cause malfunctions or damage the LCD monitor.
- **When putting the camera in your bag, ensure that hard objects do not come into contact with the LCD monitor.**
- **Do not attach accessories to the strap.**
  Doing so may cause malfunctions or damage the LCD monitor.

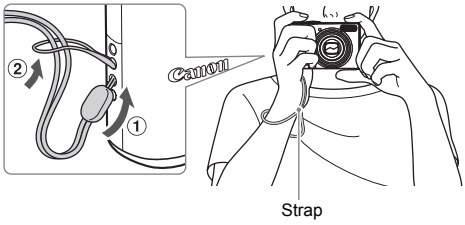
1

Getting Started

This chapter explains preparations before shooting, how to shoot in AUTO mode, and then how to view, erase and print the images you take. The latter part of this chapter explains how to shoot and view images in Easy Mode, how to shoot and view movies and how to transfer images to a computer.

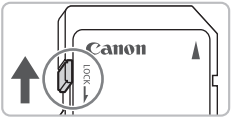
Attaching the Strap/Holding the Camera

- Attach the included strap and place it around your wrist to avoid dropping the camera during use.
- Keep your arms tight against your body while holding the camera firmly by the sides. Be sure that your fingers do not block the flash.



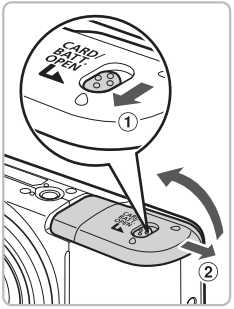
Inserting the Batteries and Memory Card

Insert the included batteries and memory card into the camera.



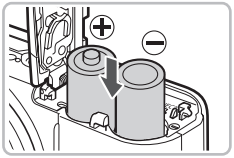
1 Check the card's write-protect tab.

- If the memory card has a write-protect tab, you will not be able to record images if the tab is in the locked position. Slide the tab up until you hear a click.



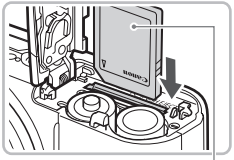
2 Open the cover.

- Slide and hold the cover lock ①, then slide and open the cover ② as shown.



3 Insert the batteries.

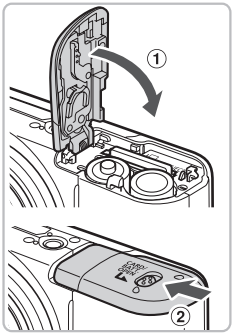
- Insert the batteries with (+) and (-) ends oriented correctly.



Label

4 Insert the memory card.

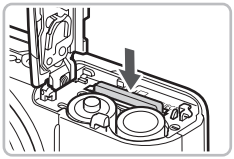
- Insert the memory card as shown until it locks into place with a click.
- Be sure the memory card is oriented correctly. Inserting the memory card in the wrong direction could damage the camera.



5 Close the cover.

- Close the cover ① and press downward as you slide it until it clicks into place ②.

Removing the Memory Card



- Push the memory card in until you hear a click, then slowly release it.

▶ The memory card will pop up.

Approximate Number of Shots That Can Be Taken

Power Source	Alkaline Batteries (Supplied)	NiMH Batteries (Sold Separately)
Number of Shots*	160	400
Playback Time (Hours)	9	11

* The number of shots that can be taken is based on the Camera & Imaging Products Association (CIPA) measurement standard.
- Under some shooting conditions, fewer shots can be taken.
- Depending on the brand of alkaline batteries used, the number of shots that can be taken may vary widely.
- The values for NiMH batteries are based on fully charged batteries.

Compatible Batteries

AA-size alkaline batteries and Canon AA-size NiMH batteries (sold separately) (pp. 36, 38).

Can any other batteries be used?

We cannot recommend the use of any other batteries than those listed above because performance varies widely.

Why use NiMH batteries?

NiMH batteries last much longer than alkaline batteries, especially in cold weather.

Battery Charge Indicator

When battery charge is low, an icon and message will appear. If the batteries are charged, the icon and message will not display.

Display	Summary
	Battery charge is low. Prepare new batteries to continue using the camera.
“Change the batteries”	The batteries are depleted. Insert new batteries.

Approximate Number of Shots per Memory Card

Memory Card	128 MB	2 GB	8 GB
Number of Shots	39	626	2505

- Values are based on the default settings.
- The number of shots that can be taken will vary depending on camera settings, the subject and the memory card used.

Can you check the number of shots that can be taken?

You can check the number of shots that can be taken when the camera is in a Shooting Mode (p. 20).

Number of shots that can be taken

Compatible Memory Cards

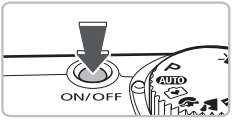
- SD memory cards
- SDHC memory cards
- MultiMediaCards
- MMCplus memory cards
- HC MMCplus memory cards

What is the write-protect tab?

SD and SDHC memory cards have a write-protect tab. If this tab is in the locked position, [Card locked!] will appear and you will not be able to take or erase images.

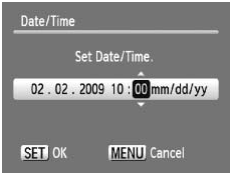
Setting the Date and Time

The Date/Time settings screen will appear the first time the camera is turned on. Since the dates and times recorded into your images are based on these settings, be sure to set them.



1 Turn on the camera.

- Press the power button.
- ▶ The Date/Time screen will appear.



2 Set the date and time.

- Press the ◀▶ buttons to select an option.
- Press the ▲▼ buttons to set a value.

3 Make the setting.

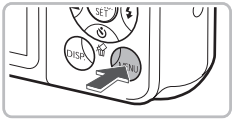
- Press the (FUNC. SET) button.
- ▶ Once the date and time have been set, the Date/Time screen will close.
- Pressing the power button will turn off the camera.

Reappearing Date/Time screen

Set the correct date and time. If you have not set the date and time, the Date/Time screen will appear each time you turn on the camera.

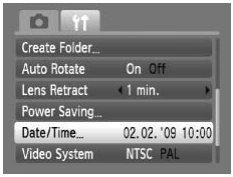
Changing the Date and Time

You can change the current date and time settings.



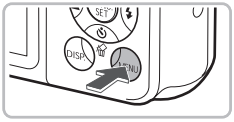
1 Display the menus.

- Press the MENU button.



2 Select [Date/Time] in the tab.

- Press the ◀▶ buttons to select the tab.
- Press the ▲▼ buttons to select [Date/Time], then press the (FUNC/SET) button.



3 Change the date and time.

- Follow Steps 2 and 3 on p. 16 to adjust the setting.
- To close the menus, press the MENU button.

Date/Time battery

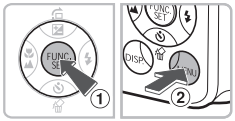
- The camera has a built-in date/time battery (backup battery) that allows the date/time settings to be retained about three weeks after the batteries has been removed.
- You can recharge the battery in approximately 4 hours by inserting AA-size alkaline batteries or using the separately sold AC adapter (pp. 36, 38). You do not need to turn the camera on to recharge the battery.
- If the date/time battery is depleted, the Date/Time menu will appear when you turn the camera on. Follow the steps on p. 16 to set the date and time.

Setting the Display Language

You can change the language displayed in the LCD monitor menus and messages.

1 Set the playback mode.

- Press the ▶ button.



2 Display the settings screen.

- Press and hold the (FUNC SET) button ①, then press the MENU button ②.

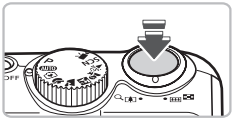
3 Set the display language.

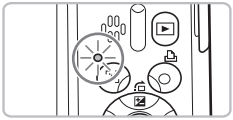
- Press the ▲▼◀▶ buttons to select a language, then press the (FUNC SET) button.
- ▶ Once the display language has been set, the language menu will close.

You can also change the display language by pressing the MENU button, selecting the 🔧 tab, and selecting the [Language] menu item.

Pressing the Shutter Button

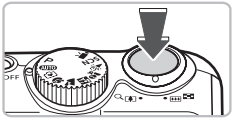
The shutter button has two stops. To take images that are in focus, be sure to first press the shutter button lightly (halfway) to focus, then take the shot.





1 Press halfway (lightly to the first stop).

- The camera automatically makes the necessary settings for shooting, such as focusing and setting the brightness.
- When the camera focuses, it will beep twice and the indicator will light green.



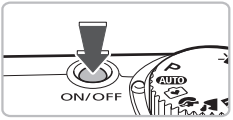
2 Press fully (to the second stop).

- The camera plays the shutter sound and takes the shot.

If you just press the shutter button fully without pausing halfway, the image may not be in focus.

AUTO Taking Pictures

Since the camera can determine the subject and shooting conditions, you can let it automatically select the best settings for the scene and just shoot. The camera can also detect and focus on faces, setting the color and brightness to optimal levels.

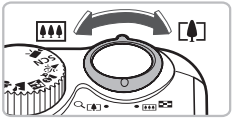


1 Turn on the camera.

- Press the power button.
- ▶ The start-up sound will play, and the start-up screen will appear.
- Pressing the power button again will turn the camera off.

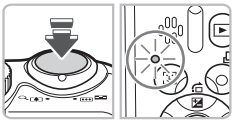
2 Select the AUTO mode.

- Set the mode dial to AUTO.
- When you point the camera toward the subject, the camera will make a slight noise as it determines the scene.
- ▶ The camera focuses on the subject it judges to be the main subject, and displays the icon for the determined scene in the upper left of the screen.
- ▶ When faces are detected, the camera focuses and a white frame appears on the face of the main subject, while gray frames appear on other detected faces.
- ▶ Even if the detected faces move, the camera will follow the faces within a certain range.



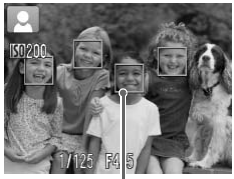
3 Compose the shot.

- Moving the zoom lever toward [T] will zoom in on your subject, making it appear larger. Moving the lever toward [W] will zoom out from your subject, making it appear smaller.

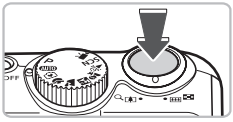


4 Focus.

- Press the shutter button halfway to focus.
- ▶ When the camera focuses, it will beep twice and the indicator will light green (orange when the flash will fire).
- ▶ Green AF frames appear where the subject is in focus.
- ▶ Several AF frames will appear when the camera focuses on more than one point.



AF Frames



5 Shoot.

- Press the shutter button fully.
- ▶ The camera will play the shutter sound and shoot. The flash will automatically fire in low light conditions.
- ▶ The indicator will blink green while the image is recorded to the memory card.
- ▶ The image will appear for about two seconds.
- You can take a second picture even while an image is displayed by pressing the shutter button.

What if...

- **The camera does not play any sounds?**
  Pressing the DISP. button while turning on the camera power will turn off all sounds except for warning sounds. To turn the sounds on, press the MENU button, select the tab, and then select [Mute]. Use the ◀▶ buttons to select [Off].

- **The image comes out dark even if the flash fired when shooting?**
  The subject is too far away for the flash to reach. Shoot within the effective flash range of approximately 30 cm – 3.5 m (12 in. – 11.5 ft.) at maximum wide angle, and approximately 50 cm – 2.0 m (1.6 ft. – 6.6 ft.) at maximum telephoto.
- **The camera beeps once when the shutter button is pressed halfway?**
  When the camera is at maximum wide angle, move about 5 cm (2.0 in.) or more away from your subject and shoot. Move about 50 cm (1.6 ft.) or more away when the camera is at maximum telephoto.
- **The lamp lights when the shutter button is pressed halfway.**
  To reduce red-eye and to assist in focusing, the lamp may light when shooting in dark areas.
- **The screen turns off when you try to take an image?**
  When flash recharging begins, the screen turns off. The screen turns on again when recharging ends.

Scene Icons

The camera displays an icon for the scene it has determined and then automatically focuses and selects the optimum settings for subject brightness and color.

Background / Subject	Bright		Including Blue Skies		Sunsets	Dark	
		Backlit		Backlit			When Using Tripod
People					—		*
Subjects Other Than People/ Landscapes							*
Close Subjects					—		—
Icon Background Color	Gray		Light Blue		Orange	Dark Blue	

* Displays when the camera is attached to a tripod.

Under certain conditions, the icon that displays may not match the actual scene. Especially when there is an orange or blue colored background (a wall for example), or the “Blue Skies” icons may appear and it may not be possible to shoot with the appropriate color. If this happens, try shooting in the **P** mode (p. 64).

▶ Viewing Images

You can view your images on the screen.

1 Select the playback mode.

- Press the ▶ button.
- ▶ The last image you took will appear.

2 Select an image.

- Pressing the ◀ button will cycle through the images in reverse order.
- Pressing the ▶ button will cycle through the images in the order they were taken.
- The images change more quickly if you keep the ◀▶ buttons pressed, but they will appear coarse.
- Pressing the ▶ button while the lens is extended will cause the shooting screen to reappear.
- The lens will retract after approximately 1 minute elapses. If you press the ▶ button with the lens retracted, the power will turn off.

Switching to and from playback mode

Pressing the ▶ button while the camera is off turns the camera on in playback mode. Pressing it again turns the camera off. Pressing the shutter button halfway while in playback mode causes the shooting screen to reappear.

Erasing Images

You can select and erase images one at a time. Please note that erased images cannot be recovered. Exercise adequate caution before erasing an image.

1 Select the playback mode.

- Press the ▶ button.
- ▶ The last image you took will appear.

2 Select an image to erase.

- Press the ◀▶ buttons to select an image.

3 Erase the image.

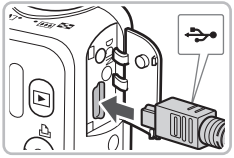
- Press the ▼ button.
- ▶ [Erase?] appears.
- Press the ◀▶ buttons to select [Erase], then press the (FUNC SET) button.
- ▶ The displayed image will be erased.
- To exit instead of erasing, press the ◀▶ buttons to select [Cancel], then press the (FUNC SET) button.

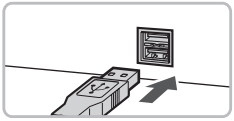
Printing Images

You can easily print the images you have taken if you connect the camera to a PictBridge compliant printer (sold separately).

Items to Prepare

- Camera and PictBridge compliant printer (sold separately)
- Interface cable supplied with the camera (p. 2)



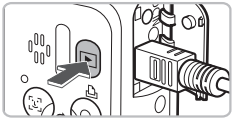


1 Turn off the camera and printer.

2 Connect the camera to the printer.

- Open the cover, and insert the small end of the plug firmly into the camera terminal in the direction shown.
- Insert the cable's larger plug into the printer. For connection details, refer to the user guide provided with the printer.

3 Turn on the printer.

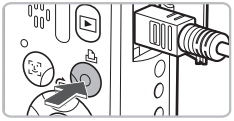


4 Turn on the camera.

- Press the ▶ button to turn on the camera.
- ▶ SET will appear, and the 🖨 button will light blue.

5 Select an image to print.

- Press the ◀▶ buttons to select an image.



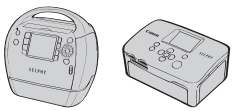
6 Print images.

- Press the 🖨 button.
- ▶ Printing will start and the 🖨 button will blink blue.
- If you want to print additional images, repeat Steps 5 and 6 after printing has completed.
- After printing has completed, turn off the camera and printer, and unplug the interface cable.

Refer to the *Personal Printing Guide* for details on the best ways to print.

Canon-Brand PictBridge Compliant Printers (Sold Separately)

By connecting your camera to one of the Canon-brand PictBridge compliant printers below, you can print your images without having to use a computer.



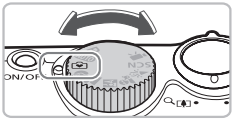
Compact Photo Printers (SELPHY series)

Inkjet Printers

For more information, visit your nearest Canon retailer.

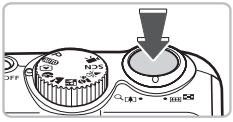
Shooting in Easy Mode

The explanations of camera operations and behavior below are basically the same as in "AUTO Taking Pictures" (p. 20) except that operational instructions are displayed on the screen, and the camera is set so that only the buttons explained on this page are functional. This prevents incorrect operation of the camera, allowing even beginners to take worry-free pictures.



1 Select the mode.

- Set the mode dial to .



2 Shoot.

- Follow Steps 3 – 5 on pp. 20 and 21 to shoot (the camera will not beep).

Turning Off the Flash

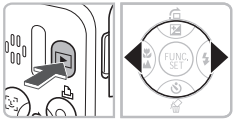
Press the ▶ button.

- ▶ The flash turns off and displays on the screen.
- Pressing the ▶ button again displays A on the screen, and the flash will automatically fire in low light conditions.

Easy Playback/Erasing

The explanations for viewing or erasing unwanted images are basically the same as in "▶ Viewing Images" (p. 23) and "Erasing Images" (p. 24) except that operational instructions are displayed on the screen, and the camera is set so that only the buttons explained on this page are functional. This prevents incorrect operation of the camera, allowing even beginners to view or erase images worry-free.

Viewing Single Images



1 Press the ▶ button.

▶ The last image you took will appear.

2 Select an image.

● Press the ◀▶ buttons to select an image.

Viewing Slideshows

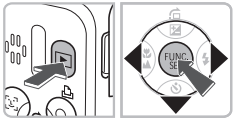
1 Press the ▶ button.

2 Press the (FUNC. SET) button.

▶ All the shots you have taken will display for about 3 seconds each.

● Press the (FUNC. SET) button again to stop the slideshow.

Erasing Images



1 Press the ▶ button.

2 Select an image to erase.

▶ Press the ◀▶ buttons to select an image.

3 Erase the image.

● Press the ▼ button and then the ◀▶ buttons to select [Erase]. Then press the (FUNC. SET) button.

▶ The selected image will be erased.

Shooting Movies

The camera can automatically select all settings so that you can shoot movies just by pressing the shutter button.

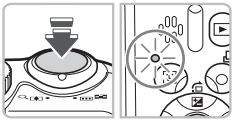
1 Select the mode.

- Set the mode dial to .

Shooting Time

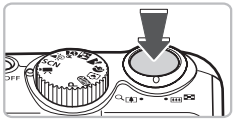
2 Compose the shot.

- Moving the zoom lever toward [] will zoom in on your subject, making it appear larger. Moving the lever toward [] will zoom out from your subject, making it appear smaller.



3 Focus.

- Press the shutter button halfway to focus.
- ▶ When the camera focuses, it will beep twice and the indicator will light green.



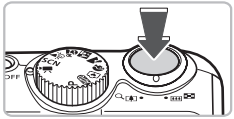
4 Shoot.

- Press the shutter button fully.
- ▶ The camera will start shooting the movie, and [● Rec] and the elapsed time will appear.
- Once shooting begins, take your finger off the shutter button.
- If you change the composition of your shot during shooting, the focus will stay the same, but the brightness and tone will automatically adjust.

Elapsed Time

Microphone

- Do not touch the microphone while shooting.
- Do not press any buttons other than the shutter button. Otherwise, the sound the buttons make will be recorded in the movie.



5 Stop shooting.

- Press the shutter button fully again.
- ▶ The camera will beep once and stop shooting the movie.
- ▶ The indicator will blink green, and the movie will record to the memory card.
- ▶ Shooting will automatically stop when the memory card fills.

Estimated Shooting Times

Memory Card	128 MB	2 GB	8 GB
Shooting Time	1 min. 4 sec.	16 min. 47 sec.	1 hr. 7 min. 6 sec.

- Shooting times are based on default settings. Shooting time can be checked on the screen in Step 1.
- Recording will automatically stop when either the clip file size reaches 4 GB or the recording time reaches approximately 1 hour.

Viewing Movies

You can view your movies on the screen.

1 Select the playback mode.

- Press the ▶ button.
- ▶ The last image you shot will appear.
- ▶ SET appears on movies.

2 Select a movie.

- Press the ◀▶ buttons to select a movie to play, then press the (FUNC. SET) button.
- ▶ The movie control panel will appear.

3 Play the movie.

- Press the ◀▶ buttons to select ▶, then press the (FUNC. SET) button.
- ▶ The movie will play.
- You can pause/resume the movie by pressing the (FUNC. SET) button again.
- Press the ▲▼ buttons to adjust the volume.
- After the movie finishes, SET appears.

Transferring Images to a Computer

You can use the included software to transfer your camera images to a computer.

System Requirements

Even though these are recommended system requirements, not all computer functions can be guaranteed.

Windows

OS	Windows Vista (including Service Pack 1) Windows XP Service Pack 2, Service Pack 3
Computer model	The above OS should be pre-installed on computers with built-in USB ports.
CPU	Pentium 1.3 GHz or higher
RAM	Windows Vista: 1 GB or more Windows XP: 512 MB or more
Interface	USB
Free Hard Disk Space	Canon Utilities • ZoomBrowser EX: 200 MB or more • PhotoStitch: 40 MB or more
Display	1,024 x 768 pixels or higher

Macintosh

OS	Mac OS X (v10.4 – v10.5)
Computer model	The above OS should be pre-installed on computers with built-in USB ports.
CPU	PowerPC G4/G5 or Intel Processor
RAM	512 MB or more
Interface	USB
Free Hard Disk Space	Canon Utilities • ImageBrowser: 300 MB or more • PhotoStitch: 50 MB or more
Display	1,024 x 768 pixels or higher

Items to Prepare

- Camera and computer
- DIGITAL CAMERA Solution Disk supplied with the camera (p. 2)
- Interface cable supplied with the camera (p. 2)

Preparations

Windows XP and Mac OS X (v10.4) are used for these explanations.

1 Install the software.

Windows

① Place the DIGITAL CAMERA Solution Disk in the computer's CD-ROM drive.

② Begin installation.

- Click [Easy Installation] and follow the onscreen instructions to proceed with the installation.

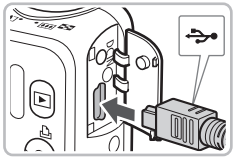
③ When the install finishes, click [Restart] or [Finish].

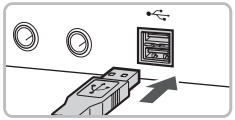
④ Remove the CD-ROM.

- Remove the CD-ROM when your desktop screen appears.

Macintosh

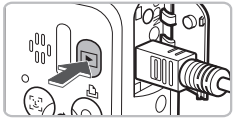
- Place the CD-ROM in the computer's CD-ROM drive and double-click the icon.
- ▶ The screen on the left displays.
- Click [Install], and follow the onscreen instructions to proceed with the installation.





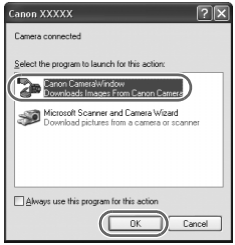
2 Connect the camera to the computer.

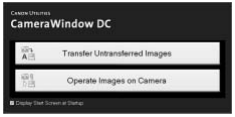
- Turn off the camera.
- Open the cover, and insert the cable's small plug into the camera terminal in the direction as shown.
- Insert the cable's larger plug into the computer's USB port. For connection details, refer to the user guide provided with the computer.



3 Turn on the camera.

- Press the ▶ button to turn on the camera.


Canon XXXXX
Camera connected
Select the program to launch for this action:
Canon CameraWindow
Download Images From Canon Camera
Microsoft Scanner and Camera Wizard
Download pictures from a camera or scanner
Always use this program for this action
OK
Cancel



4 Open CameraWindow.

Windows

- Select [Canon CameraWindow] and click [OK].
- ▶ CameraWindow will appear.
- If CameraWindow does not appear, click the [Start] menu and select [All Programs] or [Programs], followed by [Canon Utilities] ▶ [CameraWindow] ▶ [CameraWindow] ▶ [CameraWindow].

Macintosh

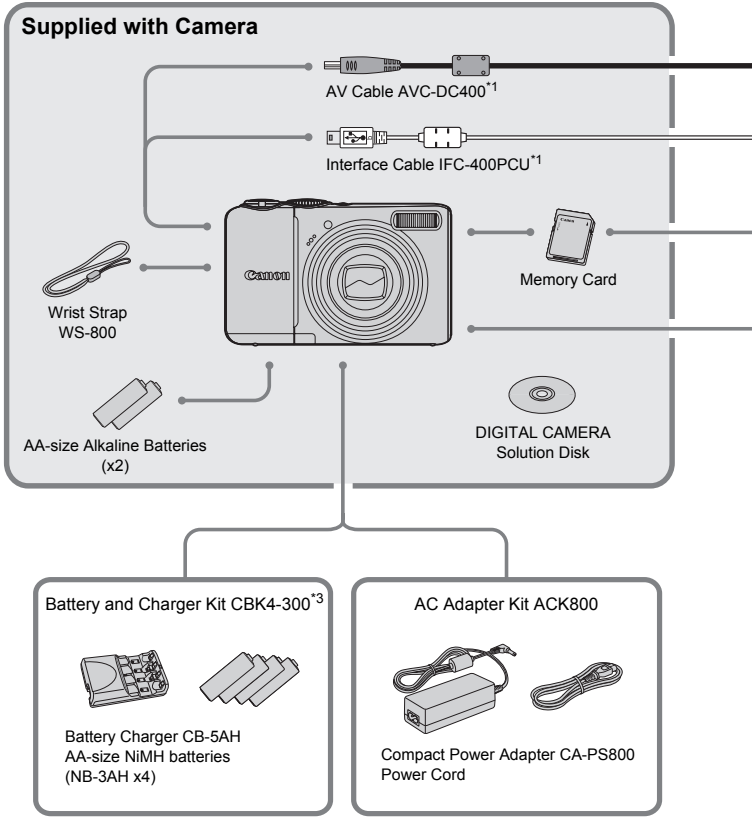
- ▶ CameraWindow will appear when a connection between the camera and computer is established.
- ● If CameraWindow does not appear, click the [CameraWindow] icon on the Dock (the bar which appears at the bottom of the desktop).

Transfer Images

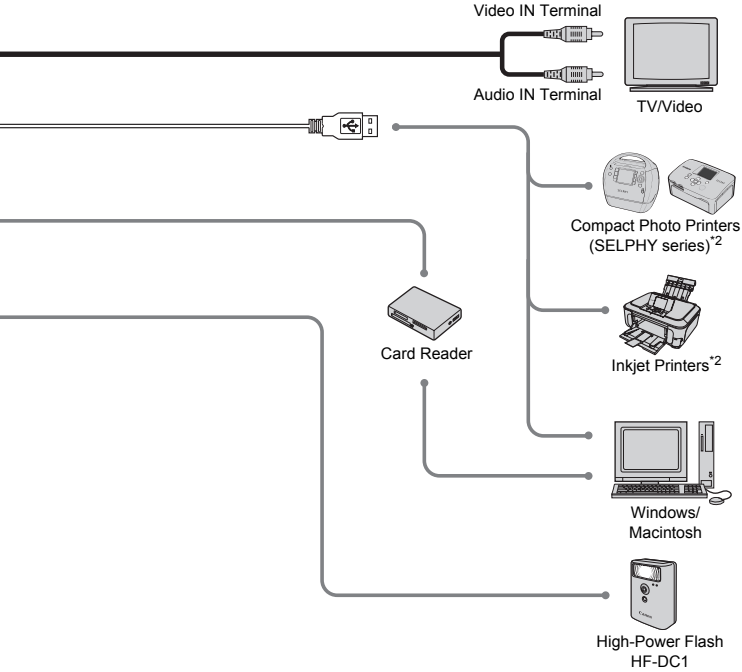
- ● Click [Transfer Untransferred Images].
- ▶ All images not previously transferred will transfer to the computer.
- ● After the transfer finishes, turn off the camera and unplug the cable.
- ● For further operations, refer to the *Software Starter Guide*.

Images transferred to the computer will be sorted by date and saved in separate folders in the “My Pictures” folder for Windows or the “Pictures” folder for Macintosh.

Accessories



*1 Also available for purchase separately.
*2 See the user guide supplied with the printer for more information on the printer and interface cables.
*3 Battery and Charger Kit CBK4-200 may also be used.



Use of genuine Canon accessories is recommended.

This product is designed to achieve excellent performance when used with genuine Canon accessories. Canon shall not be liable for any damage to this product and/or accidents such as fire, etc., caused by the malfunction of non-genuine Canon accessories (e.g., a leakage and/or explosion of a battery pack). Please note that this warranty does not apply to repairs arising out of the malfunction of non-genuine Canon accessories, although you may request such repairs on a chargeable basis.

Separately Sold Accessories

The following camera accessories are sold separately.
Some accessories are not sold in some regions, or may no longer be available.

Power Supplies

- **Battery and Charger Kit CBK4-300**
  This kit includes both a dedicated charger unit and four rechargeable AA-size NiMH (nickel metal hydride) batteries. Recommended for powering the camera for an extended period of time.
  The batteries (NiMH Battery NB4-300) are also available separately.
- **AC Adapter Kit ACK800**
  This kit lets you power the camera using household power. Recommended for powering the camera for an extended period of time or when connecting to a computer. Cannot be used to charge the batteries inside the camera.

The battery charger can also be used when abroad.

The charger can be used in regions that have 100 – 240 V (50/60 Hz) AC power. If the plug does not fit the outlet, use a commercially available plug adapter. Do not use devices such as electrical transformers for foreign travel because they will cause malfunctions.

Other Accessories

- **High-Power Flash HF-DC1**
  This attachable supplementary flash can illuminate subjects that are too distant for the light from the built-in flash to reach.

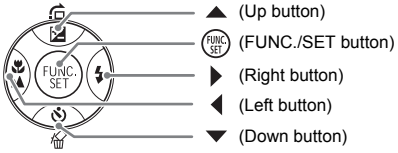
2

Learning More

This chapter explains the parts of the camera and what displays on the screen, as well as the basic operating instructions.

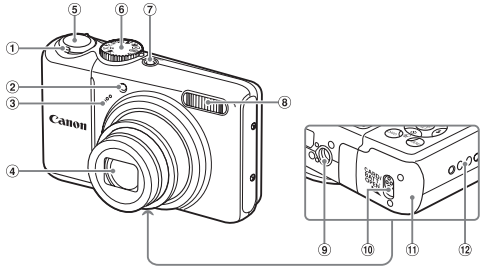
Conventions Used in this Guide

- Icons are used in the text to represent the camera buttons and switches.
- Language that displays on the screen appears inside [ ] (square brackets).
- The directional buttons and FUNC./SET button are represented by the following icons.



- : Troubleshooting tips.
- : Hints for getting more out of your camera.
- : Things you should be careful about.
- : Supplemental information.
- (p. xx): Reference pages. “xx” stands for page number.
- This chapter assumes all functions are at their default settings.

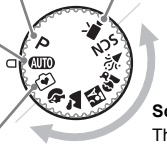
Components Guide



① Zoom Lever
Shooting: [T] (Telephoto) / [W] (Wide Angle) (p. 20)
Playback: Q (Magnify) (p. 94) / [▪▪▪] (Index) (p. 90)
② Lamp (AF Assist Beam (p. 109) / Red-Eye Reduction Lamp (p. 109) / Self-Timer Lamp (pp. 60, 61, 72, 73))
③ Microphone (p. 30)
④ Lens
⑤ Shutter Button (p. 19)
⑥ Mode Dial
⑦ Power Button (p. 20)
⑧ Flash (p. 56)
⑨ Tripod Socket
⑩ Cover Lock (p. 12)
⑪ Memory Card / Battery Cover (p. 12)
⑫ Strap Mount (p. 11)

Mode Dial

Use the mode dial to change modes.



Program AE Mode
You can select settings yourself to take various types of pictures (p. 64).

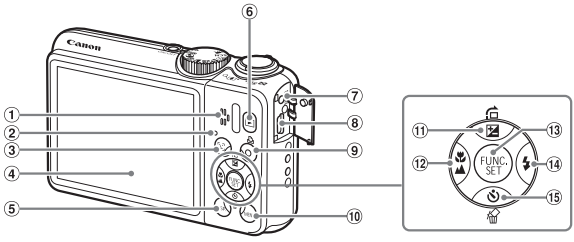
Auto Mode
You can shoot letting the camera select all settings automatically (p. 20).

Easy Mode
Just press the shutter button for worry-free pictures (p. 27).

Movie Mode
You can shoot movies (p. 29).

Scene Modes
The camera automatically selects the best settings for the scene so that you can take images just by pressing the shutter button (p. 52).

Turning the mode dial in Playback mode will switch the camera to Shooting mode.



① Speaker
② Indicator (p. 44)
③ [face] (Face Selector) Button (p. 79)
④ Screen (LCD Monitor) (pp. 42, 43)
⑤ DISP. (Display) Button (pp. 42, 43)
⑥ ▶ (Playback) Button (p. 23)
⑦ DC IN (Power input) Terminal (p. 114)
⑧ A/V OUT (Audio/Video Output) and DIGITAL Terminal (pp. 25, 34, 95)
⑨ 🖶 (Direct Print) Button (pp. 25, 112)
⑩ MENU Button (p. 46)
⑪ ± (Exposure Compensation) (p. 68) / ↷ (Jump) (p. 91) / ▲ Button
⑫ 🌷 (Macro) (p. 65) / ⛰ (Infinity) (p. 65) / ◀ Button
⑬ FUNC./SET (Function/Set) Button (p. 45)
⑭ ϟ (Flash) (pp. 56, 64) / ▶ Button
⑮ ⏲ (Self-Timer) (pp. 60, 61) / 🗑 (Single Image Erase) (p. 24) / ▼ Button

Power Saving Function (Auto Power Down)

To save battery power, the camera shuts down automatically when it is not operated for a certain time.

Power Saving during Shooting

The monitor will turn off approximately 1 minute after the camera is last operated. After about 2 more minutes, the lens will retract and the power will turn off.

When the monitor has turned off but the lens has not retracted yet, pressing the shutter button halfway (p. 19) turns on the monitor and shooting can continue.

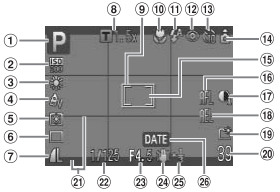
Power Saving during Playback

The power will turn off approximately 5 minutes after the camera is last operated.

- You can turn off the Power Saving Function (p. 106).
- You can adjust the time before the monitor turns off (p. 106).

Information Displayed on the Screen

Shooting (Information Display)



① Shooting Mode (p. 40)
② ISO Speed (p. 69)
③ White Balance (p. 70)
④ My Colors (p. 71)
⑤ Metering Modes (p. 80)
⑥ Drive Mode (p. 68)
⑦ Image Quality (Compression) (p. 66)/ Recording Pixels (p. 66)
⑧ Digital Zoom Magnification (p. 58)/ Digital Tele-Converter (p. 59)
⑨ AF Frame (p. 21)
⑩ Macro (p. 65), Infinity (p. 65)
⑪ Flash Mode (pp. 56, 64, 81)
⑫ Red-Eye Correction (p. 83)
⑬ Self-Timer (pp. 60, 61, 72, 73)
⑭ Camera Orientation*
⑮ Spot AE Point Frame (p. 80)
⑯ AF Lock (p. 77)
⑰ i-Contrast (p. 82)
⑱ AE Lock (pp. 80, 87), FE Lock (p. 81)
⑲ Create Folder (p. 107)
⑳ Still Images: Recordable shots (p. 15)
Movies: Remaining Time/Elapsed Time (p. 30)
㉑ Disp. Overlay (p. 111)
㉒ Shutter Speed
㉓ Aperture Value
㉔ Image Stabilizer (p. 111)
㉕ Exposure Compensation (p. 68)
㉖ Date Taken/Recorded (p. 57)

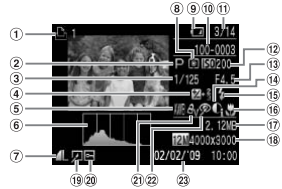
* : Standard, : Held vertically
When shooting, the camera detects if it is held vertically or horizontally, and adjusts settings accordingly for the best shot. It also detects orientation during playback, so you can hold the camera in either orientation and it will automatically rotate images for correct viewing.
This function may not operate correctly when the camera is pointed straight up or down.

Switching the Display

You can change the display using the DISP. button.

No Information Display　　Information Display

Playback (Detailed Information Display)



① Print List (p. 101)
② Shooting Mode (p. 40)
③ Shutter Speed
④ Exposure Compensation (p. 68), Exposure Shift (p. 87)
⑤ White Balance (p. 70)
⑥ Histogram (p. 44)
⑦ Image Quality (Compression) (p. 66)/ Recording Pixels (p. 66), AVI (Movies)
⑧ Metering Modes (p. 80)
⑨ Battery Charge Indicator (p. 14)
⑩ Folder Number – File Number (p. 107)
⑪ Displayed image number/Total number of images
⑫ ISO Speed (p. 69)
⑬ Aperture Value, Image Quality (Movies)
⑭ i-Contrast (pp. 82, 99)
⑮ Flash Sync (pp. 64, 81)
⑯ Macro (p. 65), Infinity (p. 65)
⑰ File Size
⑱ Still Images: Recording Pixels (p. 67) Movies: Movie Length (p. 86)
⑲ Image Editing (pp. 98 – 100)
⑳ Protect (p. 96)
㉑ My Colors (p. 71)
㉒ Red-Eye Correction (pp. 83, 100)
㉓ Shooting Date and Time (p. 16)

Switching the Display

You can change the display using the DISP. button.

You can also switch the display by pressing the DISP. button while the image displays shortly after shooting. However, the Simple Information will not display.

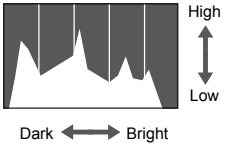
Display in Dark Conditions during Shooting

The display automatically brightens when shooting in dark conditions, allowing you to check the composition (Night Display function). However, the brightness of the image on the screen, and the brightness of the actual image recorded may be different. Screen noise may appear and the movement of the subject may appear somewhat jagged on the screen. This has no effect on the recorded image.

Overexposure Warning during Playback

In “Detailed Information Display” (p. 43), overexposed areas of the image flash on the screen.

Histogram during Playback



- The graph that appears in “Detailed Information Display” (p. 43) is called the histogram. The histogram shows the distribution and amount of brightness of an image. When the graph approaches the right side, the image is bright, but when it approaches the left side, the image is dark, and in this way you can judge the exposure.

Indicator

The indicator on the back of the camera (p. 41) will light or blink under the following conditions.

Colors	Status	Operation Status
Green	Lights	Shooting preparation complete (p. 21)/Display Off (p. 106)
	Blinks	Recording/reading/transmitting image data (p. 21)
Orange	Lights	Shooting preparation complete (flash on) (p. 21)
	Blinks	Camera shake warning (p. 56)

When the indicator blinks green, data is being recorded to/read from the memory card or various information is being transmitted. Do not turn off the power, open the memory card slot/battery cover, shake or jolt the camera. These actions may corrupt the image data or cause the camera or memory card to malfunction.

FUNC. Menu – Basic Operations

Commonly used shooting functions can be set with the FUNC. menu. The menu items and options differ depending on the mode (p. 120).

1 Select a shooting mode.

- Set the mode dial to the desired shooting mode.

2 Display the FUNC. menu.

- Press the (FUNC. SET) button.

Selectable Options

Menu Items

3 Select a menu item.

- Press the ▲▼ buttons to select a menu item.
- ▶ The selectable options for the menu item appear in the lower part of the screen.

4 Select an option.

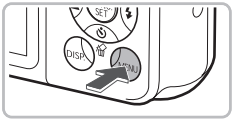
- Press the ◀▶ buttons to select an option.
- You can also select settings by pressing the DISP. button on options that display (DISP.).

5 Make the setting.

- Press the (FUNC. SET) button.
- ▶ The shooting screen will reappear and the setting you selected will display on the screen.

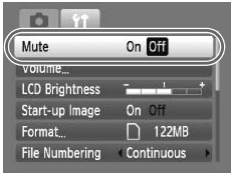
MENU Menu – Basic Operations

Various functions can be set from the menus. The menu items are organized under tabs, such as for shooting (📷) and playback (▶). The menu items differ depending on the mode (pp. 122 – 125).



1 Display the menu.

- Press the MENU button.

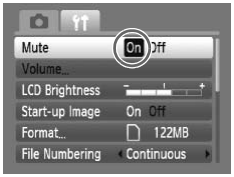


2 Select a tab.

- Press the ◀▶ buttons, or move the zoom lever (p. 40) left or right to select a tab (category).

3 Select a menu item.

- Press the ▲▼ buttons to select a menu item.
- Some items require you to press the (FUNC SET) button to display a submenu in which you change the setting.

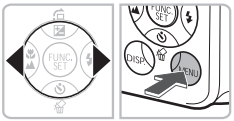


4 Select an option.

- Press the ◀▶ buttons to select an option.

5 Make the setting.

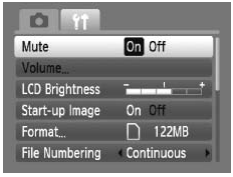
- Press the MENU button.
- ▶ The standard screen will reappear.

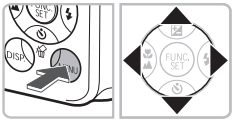


Changing the Sound Settings

You can silence or adjust the volume of camera sounds.

Muting Sounds





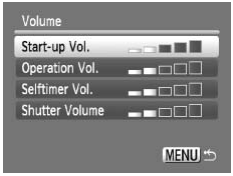
1 Display the menu.

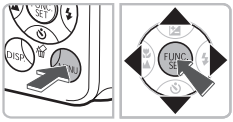
- Press the MENU button.

2 Select [Mute].

- Press the ◀▶ buttons to select the 🔧 tab.
- Press the ▲▼ buttons to select [Mute], then use the ◀▶ buttons to select [On].

Adjusting the Volume





1 Display the menu.

- Press the MENU button.

2 Select [Volume].

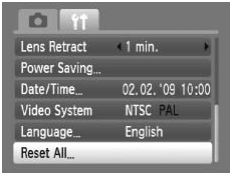
- Press the ◀▶ buttons to select the 🔧 tab.
- Press the ▲▼ buttons to select [Volume], then press the (FUNC SET) button.

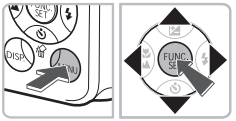
3 Change the volume.

- Press the ▲▼ buttons to select an item, then use the ◀▶ buttons to adjust the volume.

Returning the Camera to Default Settings

When you have mistakenly changed a setting, you can reset the camera to the default settings.



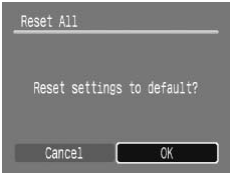


1 Display the menu.

- Press the MENU button.

2 Select [Reset All].

- Press the ◀▶ buttons to select the tab.
- Press the ▲▼ buttons to select [Reset All], then press the (FUNC SET) button.



3 Reset the settings.

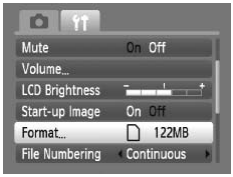
- Press the ◀▶ buttons to select [OK], then press the (FUNC SET) button.
- ▶ The camera will reset to the default settings.

Are there functions that cannot be reset?

- The [Date/Time] (p. 16) in the tab, [Language] (p. 18), [Video System] (p. 95).
- The saved data for custom white balance (p. 70).

Formatting Memory Cards

Before you use a new memory card or one that has been used in other devices, you should format the card with this camera. Formatting (initializing) a memory card erases all data on the memory card. As you cannot retrieve the erased data, exercise adequate caution before formatting the memory card.

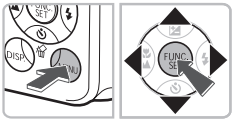


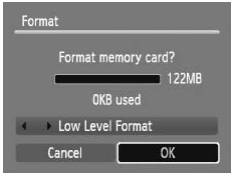
1 Display the menu.

- Press the MENU button.

2 Select [Format].

- Press the ◀▶ buttons to select the 🔧 tab.
- Press the ▲▼ buttons to select [Format], then press the (FUNC. SET) button.



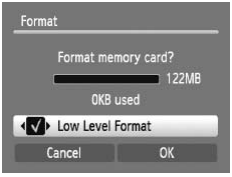


3 Format the memory card.

- Press the ◀▶ buttons to select [OK], then press the (FUNC. SET) button.
- ▶ The memory card will be formatted.
- ▶ When formatting has finished, the menu screen will reappear.

Low Level Format

Perform low level formatting when you think that the recording/reading speed of a memory card has dropped.



- Follow Steps 1 – 2 above to display the [Format] screen.
- Press the ▲▼ buttons to select [Low Level Format], then use the ◀▶ buttons to display ✓.
- Press the ▲▼◀▶ buttons to select [OK], then press the (FUNC. SET) button.
- ▶ Low level formatting starts.

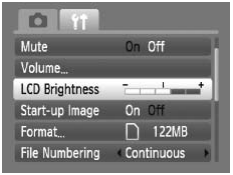
About formatting

- The supplied memory card has already been formatted.
- When the [Memory card error] message appears, or when the camera does not work correctly, formatting the memory card may solve the problem. Copy the images from the memory card to a computer or other device before formatting.

Formatting or erasing data on a memory card merely changes the file management information on the card and does not ensure its contents are completely erased. Be careful when transferring or disposing of a memory card. When disposing of a memory card, take precautions such as physically destroying the card to prevent personal information leaks.

- The total capacity of the memory card displayed in the formatting screen may be less than indicated on the memory card.
- Low level formatting may take longer than standard formatting, since all recorded data are erased.
- You can stop a low level format of a memory card by selecting [Stop]. When stopping low level formatting, the data will be erased but the memory card can be used without problem.

Changing the Screen Brightness

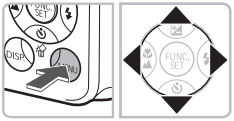


1 Display the menu.

- Press the MENU button.

2 Select [LCD Brightness].

- Press the ◀▶ buttons and select the tab.
- Press the ▲▼ buttons to select [LCD Brightness].



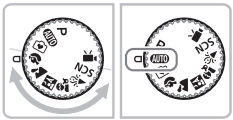
3 Adjust the brightness.

- Press the ◀▶ buttons to adjust the brightness.
- Press the MENU button to accept the setting.

3

Shooting in Special Conditions and Commonly Used Functions

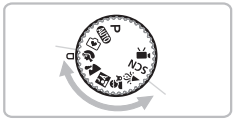
This chapter explains how to shoot in different conditions, as well as how to use other common functions, such as the flash and self-timer.



- When you set the mode dial to a scene mode, or select a scene in **SCN** mode, that matches a particular set of conditions, the camera will automatically select any necessary settings. All you need do is press the shutter button to take an optimized picture.
- This chapter assumes the mode dial is set to **AUTO** for "Turning the Flash Off" (p. 56) to "Using the Face Self-Timer" (p. 61). When shooting in a scene mode, check which functions are available in that mode (pp. 120 – 123).

Shooting in Various Conditions

The camera will select the necessary settings for the conditions in which you wish to shoot when you select the matching mode.



1 Select a shooting mode.

- Set the mode dial to the scene you wish to shoot.

2 Shoot.

Take portraits (Portrait)

- Produces a soft effect when photographing people.

Take landscapes (Landscape)

- For shooting majestic landscapes.

Take snapshots at night (Night Snapshot)

- Lets you take beautiful snapshots of people against city nightscapes or night backgrounds.
- If you hold the camera firmly, you can take pictures with reduced camera shake, even without a tripod.

Take shots of kids and pets (Kids&Pets)

- Lets you capture subjects that move around, such as children and pets, without missing photo opportunities.

Take indoor shots (Indoor)

- Lets you shoot indoors with natural colors.

In , , or mode, images may appear coarse because the ISO speed (p. 69) is increased to match the shooting conditions.

SCN Shooting in Special Conditions

The camera will select the necessary settings for the conditions in which you wish to shoot when you select the matching mode.

1 Select a shooting mode.

- Set the mode dial to **SCN** and press the (FUNC. SET) button.

- Press the ▲▼ buttons to select , then use the ◀▶ buttons to select a mode.
- Press the (FUNC. SET) button.

2 Shoot.

Shoot sunsets (Sunset)

- Lets you take shots of sunsets in vivid colors.

Take nightscapes (Night Scene)

- Lets you take beautifully lit city nightscapes or night backgrounds.

Take shots of fireworks (Fireworks)

- Lets you take shots of fireworks in vivid colors.

Take shots of people at the beach (Beach)

- Lets you take bright shots of people on sandy beaches where the reflected sunlight is strong.

Take shots of aquatic life in an aquarium (Aquarium)

- Lets you take natural-colored shots of aquatic life in indoor aquariums.

Take shots of foliage (Foliage)

- Lets you shoot trees and leaves, such as new growth, autumn leaves or blossoms, in vivid colors.

Take shots of people in snow (Snow)

- Lets you take bright, natural-colored shots of people against snowy backgrounds.

Shoot using high ISO speed (ISO3200)

- Sets the ISO speed to 3200, and lets you shoot without camera shake or subject blurring even in low light conditions.
- Recording pixels are set to M3 (1600 x 1200 pixels) (p. 66).

- In mode, make sure the subject does not move until the shutter sound plays, even after the flash fires.
- In or mode, attach the camera to a tripod to prevent the camera from moving and blurring the image. Additionally, you are recommended to set [IS Mode] to [Off] (p. 111).
- In mode, images may appear coarse because the ISO speed (p. 69) is increased to match the shooting conditions.
- In mode, images may appear coarse.

Turning the Flash Off

You can shoot with the flash turned off.

1 Press the ▶ button.

2 Select .

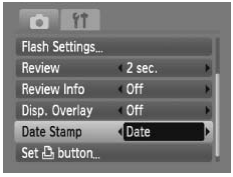
- Press the ◀▶ buttons to select , then press the (FUNC. SET) button.
- ▶ will appear.
- Follow the steps above to return the setting to ^{A}.

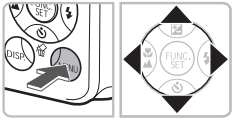
What if the indicator blinks orange and a flashing appears?

When you press the shutter button halfway in low light conditions where camera shake is likely, the indicator will blink orange and a flashing will appear. Attach the camera to a tripod to prevent it from moving.

Inserting the Date and Time

You can insert the shooting date and time in the lower right corner of an image. Once inserted, however, they cannot be deleted. Be sure to check beforehand that the date and time are correctly set (p. 16).





1 Select [Date Stamp].

- Press the MENU button.
- Press the ◀▶ buttons to select the 📷 tab, then use the ▲▼ buttons to select [Date Stamp].

2 Select the setting.

- Press the ◀▶ buttons to select [Date] or [Date & Time].
- Pressing the MENU button will restore the shooting screen.

▶ [DATE] will appear.

3 Shoot.

▶ You can insert the shooting date and time in the image's lower right corner.

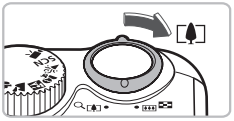
- To restore to the original setting, select [Off] in Step 2.

Inserting and printing the date and time in images which do not have an embedded date and time

- **Use the DPOF print settings (p. 102) to print.**
- **Use the included software to print.**
  Refer to the *Software Starter Guide* for details.
- **Connect the camera to a printer to print.**
  Refer to the *Personal Printing Guide* for details.

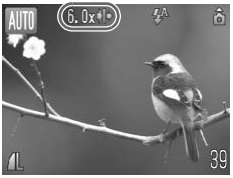
Zooming in More Closely on Subjects (Digital Zoom)

You can use the digital zoom to zoom up to a maximum of 24x and capture subjects that are too far away for the optical zoom (p. 20) to enlarge. The images may appear coarse, however, depending on the recording pixel setting (p. 66) and the zoom factor used.



1 Move the zoom lever toward [T].

- Hold the lever until zooming stops.
- ▶ When you release the zoom lever, the largest possible zoom factor without image deterioration, and ⇹ will appear.



2 Move it toward [T] again.

- ▶ The digital zoom will further zoom in on the subject.

Zoom Factors at which Images Deteriorate

Recording Pixels	Optical Zoom	Digital Zoom
L	6.0x →	
M1		7.4x →
M2		9.3x →
M3		15x →
S		24x →

□ ■ : No image deterioration (zoom factor appears white)

■ : Image deterioration (zoom factor appears blue)

→ : Maximum zoom factor without deterioration (Safety Zoom)

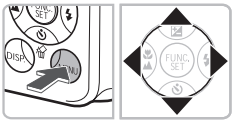
Turning off the digital zoom

To turn off the digital zoom, press the MENU button, select the 📷 tab, and select [Digital Zoom] and the [Off] option.

The focal length when using digital zoom is 36 – 864 mm (35mm film equivalent).

Digital Tele-Converter

The focal length of the lens can be increased by an equivalent of 1.5x or 2.0x. This enables a faster shutter speed and less chance of camera shake than the zoom (including digital zoom) used by itself at the same zoom factor.
The images may appear coarse, however, depending on the combination of recording pixel (p. 66) and digital tele-converter settings used.



1 Select [Digital Zoom].

- Press the MENU button.
- Press the ◀▶ buttons to select the tab, then use the ▲▼ buttons to select [Digital Zoom].

2 Accept the setting.

- Press the ◀▶ buttons to select [1.5x] or [2.0x].
- Pressing the MENU button will restore the shooting screen.
- ▶ The view will be enlarged, and the zoom factor will display on the screen.
- To return to standard digital zoom, select [Digital Zoom] and the [Standard] option.

Combinations that Cause Image Deterioration

- Using [1.5x] at a recording pixel setting of L or M1 will cause image deterioration (and the zoom factor will display in blue).
- Using [2.0x] at a recording pixel setting of L, M1 or M2 will cause image deterioration (and the zoom factor will display in blue).

- The respective focal lengths when using [1.5x] and [2.0x] are 54 – 324 mm and 72 – 432 mm (35mm film equivalent).
- The digital tele-converter cannot be used together with the digital zoom.

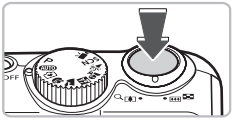
Using the Self-Timer

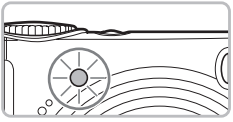
The self-timer can be used to shoot a group photo that includes the camera operator. The camera will activate approximately 10 seconds after the shutter button is pressed.

1 Press the ▼ button.

2 Select .

- Press the ▲▼ buttons to select , then press the (FUNC SET) button.
- ▶ Once set, will appear.





3 Shoot.

- Press the shutter button halfway to focus on the subject, then press it fully.
- ▶ When the self-timer starts, the lamp blinks and the self-timer sound plays.
- ▶ Two seconds before the shutter releases, the lamp and sound speed up (the lamp remains lit when the flash will fire).
- To restore the original setting, select in Step 2.

You can change the delay time and number of shots (p. 73).

Using the Face Self-Timer

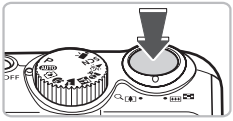
Once you compose the shot, such as for a group photo, and press the shutter button, the camera will take three shots in a row two seconds after it detects your face (p. 76) when you enter the composition.

1 Select .

- Follow Step 2 on p. 60 and select .

2 Compose the shot and press the shutter button halfway.

- Make sure a green frame appears on the face focused on by the camera and white frames appear on other faces.



3 Press the shutter button fully.

- The camera will enter shooting stand-by, and [Look straight at camera to start count down] will appear.
- The lamp will blink and the self-timer sound will play.

4 Join the subjects and look at the camera.

- When the camera detects a new face, the lamp and sound will speed up (the lamp remains lit when the flash will fire), and two seconds later the shutter will release.
- The second and third shots will continue in succession.
- To restore the original setting, select in Step 2 on p. 60.

What if a face is not detected?

Even if your face is not detected after joining the subjects, the shutter will release approximately 30 seconds later.

Changing the number of shots

In Step 1, press the MENU button, then press the ◀▶ buttons to change the number of shots. Press the (FUNC/SET) button to accept the setting.

4

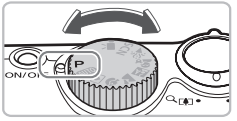
Selecting Settings Yourself

In this chapter you will learn how to use the various functions in **P** mode to progressively advance your shooting skills.

- This chapter assumes that the mode dial is set to **P** (p. 40).
- **P** stands for Program AE.
- Before attempting to shoot using a function explained in this chapter in modes other than **P** mode, check if the function is available in those modes (pp. 120 – 123).

P Shooting in Program AE

You can select the settings for various functions to suit your preferences. AE stands for Auto Exposure.



1 Set the mode dial to P (p. 40).

2 Adjust the settings according to your purposes (pp. 64 – 73).

3 Shoot.

What if the shutter speed and aperture value are displayed in red?

If a correct exposure cannot be obtained when pressing the shutter button halfway, the shutter speed and aperture value display in red. Try the following settings to obtain the correct exposure.

- Turn on the flash
- Select a higher ISO speed (p. 69)

ϟ Turning the Flash On

You can make the flash fire every time you shoot. At maximum wide angle, the flash range is approximately 30 cm – 3.5 m (12 in. – 11.5 ft.), and at maximum telephoto, it is 50 cm – 2.0 m (1.6 ft. – 6.6 ft.)

Select ϟ.

- After pressing the ▶ button, press the ◀▶ buttons to select ϟ, then press the (FUNC SET) button.
- ▶ Once set, ϟ will appear.

Shooting Close-ups (Macro)

You can shoot an object at a close distance or even shoot extreme close-ups of it. The shooting range is approximately 1 – 50 cm (0.39 in. – 1.6 ft.) from the end of the lens (when the zoom lever is pushed to the maximum [W]).

Select .

- After pressing the ◀ button, press the ◀▶ buttons to select , then press the (FUNC SET) button.
- ▶ Once set, will appear.

About the Zoom Bar

- When you move the zoom lever, the zoom bar appears on the screen. When shooting in Macro mode, the camera cannot focus in the range of the yellow bar.
- When zooming within the range of the yellow bar, will be grayed out and shooting will be done in .

Using

You are recommended to attach the camera to a tripod and shoot in , to prevent the camera from moving and blurring the image (p. 72).

The edges of the image may darken if the flash fires.

Shooting Far Away Subjects (Infinity)

You can shoot landscapes and far away subjects. The focusing range is 3 m (9.8 ft.) and greater from the camera.

Select .

- After pressing the ◀ button, press the ◀▶ buttons to select , then press the (FUNC SET) button.
- ▶ Once set, will appear.

Changing the Recording Pixels (Image Size)

You can select from six settings.

1 Select the recording pixels.

- After pressing the (FUNC SET) button, press the ▲▼ buttons to select L.

2 Select an option.

- Press the ◀▶ buttons to select an option, then press the (FUNC SET) button.
- ▶ The setting you selected will display on the screen.

If you select W, you cannot use the Digital Zoom (p. 58) or Digital Tele-Converter (p. 59).

Changing the Image Quality (Compression Ratio)

You can select from the following two levels of image quality: (Fine), (Normal).

1 Select the recording pixels.

- After pressing the (FUNC SET) button, press the ▲▼ buttons to select L.

2 Change the image quality.

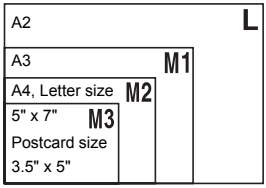
- Press the DISP. button.
- Press the ◀▶ buttons to select an option, then press the (FUNC SET) button.
- ▶ The setting you selected will display on the screen.

Approximate Values for Recording Pixels and Image Quality

Recording Pixels	Image Quality	Single Image Data Size (Approx. KB)	Number of Recordable Images		
			128 MB	2 GB	8 GB
L (Large) 12M/4000 x 3000	◢	3084	39	626	2505
	▟	1474	82	1280	5116
M1 (Medium 1) 8M/3264 x 2448	◢	2060	59	930	3721
	▟	980	123	1920	7675
M2 (Medium 2) 5M/2592 x 1944	◢	1395	87	1365	5457
	▟	695	173	2672	10679
M3 (Medium 3) 2M/1600 x 1200	◢	558	217	3235	12927
	▟	278	411	6146	24562
S (Small) 0.3M/640 x 480	◢	150	711	10245	40937
	▟	84	1118	15368	61406
W (Widescreen) 4000 x 2248	◢	2311	53	830	3318
	▟	1105	109	1707	6822

- The values in the table are measured according to Canon standards and may change depending on the subject, memory card and camera settings.

Approximate Values when Selecting by Paper Size



- S Suitable for sending images as e-mail attachments.
- W For printing on wide size paper.

Adjusting the Brightness (Exposure Compensation)

You can adjust the standard exposure set by the camera in 1/3-stop increments in the range of -2 to +2.

Correct the exposure.

- After pressing the ▲ button, press the ◀▶ buttons to correct the exposure. Then press the (FUNC SET) button.
- The exposure compensation amount will display on the screen.

Continuous Shooting

You can shoot continuously at about 1.1 images/second.

1 Select the drive mode.

- After pressing the (FUNC SET) button, press the ▲▼ buttons to select □.

2 Select 🖳.

- Press the ◀▶ buttons to select 🖳, then press the (FUNC SET) button.
- Once set, 🖳 will appear.

3 Shoot.

- As long as you hold the shutter button down, the camera will shoot successive images.

- Cannot be used with the self-timer (pp. 60, 61, 72, 73).
- For continuous shooting, the focus and exposure are locked when the shutter button is pressed halfway.
- As the number of images increases, the shooting intervals may take longer.
- If the flash fires, shooting intervals may take longer.

ISO Changing the ISO Speed

1 Select the ISO speed.

- After pressing the (FUNC SET) button, press the ▲▼ buttons to select ISO AUTO.

2 Select a menu item.

- Press the ◀▶ buttons to select an option, then press the (FUNC SET) button.
- ▶ The setting you select will display on the screen.

ISO AUTO		Automatically sets the optimal speed for the shooting mode and shooting conditions.
ISO 80 ISO 100 ISO 200	Low ↕	Fine weather conditions, outdoor shooting
ISO 400 ISO 800		Cloudy, Twilight
ISO 1600	High	Nightscapes, Dark interiors

Changing the ISO speed

- Lowering the ISO speed results in sharper images, but there may be an increased chance of image blurring in certain shooting conditions.
- Raising the ISO speed results in a faster shutter speed, reducing camera shake and letting the flash reach greater distances to the subject. The images, however, will appear coarse.

- When the camera is set to ISO AUTO, you can press the shutter button halfway to display the automatically set ISO speed.
- With ISO3200 you can set an even faster speed (p. 55).

Adjusting the White Balance

The white balance (WB) function sets the optimal white balance for natural looking colors.

1 Select the white balance.

- After pressing the (FUNC SET) button, press the ▲▼ buttons to select AWB.

2 Select an option.

- Press the ◀▶ buttons to select an option, then press the (FUNC SET) button.
- ▶ The setting you select will display on the screen.

AWB	Auto	Automatically sets the optimal white balance for the shooting conditions.
☀	Day Light	Fine weather conditions, outdoor shooting
☁	Cloudy	Cloudy, shady, twilight conditions
💡	Tungsten	Tungsten, bulb-type (3-wavelength) fluorescent lighting
	Fluorescent	Warm-white fluorescent, cool-white fluorescent, warm-white-type (3-wavelength) fluorescent lighting
H	Fluorescent H	Daylight fluorescent, daylight-type (3-wavelength) fluorescent lighting
	Custom	Manually sets a custom white balance.

Custom White Balance

You can adjust the white balance to the light source at the shooting location for natural looking colors when shooting. Make sure that you set the white balance under the lighting conditions of the shooting scene.

- In Step 2 above, select .
- Make sure the entire screen is filled with the white subject, then press the DISP. button.
- ▶ The tint on the screen will change when a white balance data is set.

Changing the Tone of an Image (My Colors)

You can change the tone of an image to sepia or black and white when shooting.

1 Select My Colors.

- After pressing the (FUNC SET) button, press the ▲▼ buttons to select $\mathcal{A}_{OFF}$.

2 Select an option.

- Press the ◀▶ buttons to select an option, then press the (FUNC SET) button.
- ▶ The setting you select will display on the screen.

$\mathcal{A}_{OFF}$	My Colors Off	—
$\mathcal{A}_{V}$	Vivid	Emphasizes the contrast and color saturation for a vivid impression.
$\mathcal{A}_{N}$	Neutral	Tones down the contrast and color saturation for neutral hues.
$\mathcal{A}_{Se}$	Sepia	Sepia tones.
$\mathcal{A}_{BW}$	B/W	Black and white.
$\mathcal{A}_{C}$	Custom Color	You can adjust the tone of the image to your preference.

The white balance cannot be set in the $\mathcal{A}_{Se}$ and $\mathcal{A}_{BW}$ modes (p. 70).

$\mathcal{A}_{C}$ Custom Color

The contrast, sharpness and color saturation in an image can be selected and set from 5 different levels.

- Select $\mathcal{A}_{C}$ in Step 2 above and press the DISP. button.
- Press the ▲▼ buttons to select an option, then use the ◀▶ buttons to select a value.
- The more to the right, the stronger/deeper the effect gets, the more to the left, the weaker/lighter the effect gets.
- Press the DISP. button to accept the setting.

Shooting Using a TV Monitor

You can use a TV to display the camera screen content.

- Connect the camera to a TV as described in “Viewing Images on a TV” (p. 95).
- Shooting procedures are the same as when using the camera’s monitor.

Shooting Using the Two Second Self-Timer

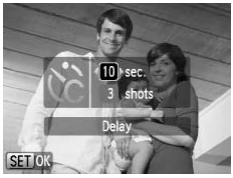
You can set the self-timer to a delay of approximately two seconds.

Select .

- After pressing the ▼ button, press the ▲▼ buttons to select , then press the (FUNC SET) button.
- Once set, will appear.
- Follow Step 3 on p. 60 to shoot.

Customizing the Self-Timer

You can set the time delay (0 – 30 seconds) and the number of shots taken (1 – 10 shots).



1 Select ⏲.

- After pressing the ▼ button, press the ▲▼ buttons to select ⏲, then immediately press the MENU button.

2 Select the settings.

- Press the ▲▼ buttons to select [Delay] or [Shots].
- Press the ◀▶ buttons to select a value, then press the (FUNC SET) button.
- Follow Step 3 on p. 60 to shoot.

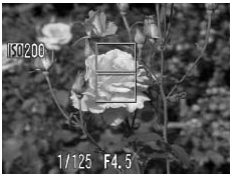
What if the number of shots is set to two or more shots?

- Exposure and white balance settings are set with the first shot.
- When you set the time delay for more than 2 seconds, the self-timer lamp and sound speed up 2 seconds before the shutter releases (when the flash will fire, the lamp lights).

- If the flash fires, the shooting interval may be longer.
- If you set a high number of shots, the shooting interval may be longer.
- If the memory card becomes full, shooting stops automatically.

Changing the Composition with the Focus Lock

While you press and hold the shutter button halfway, the focus and exposure are fixed. You can now recompose and shoot. This is called Focus Lock.



1 Focus.

- Center the subject you want in focus, and press the shutter button halfway.
- Confirm that the AF Frame on the subject is green.

2 Recompose.

- Hold the shutter button pressed halfway and recompose the scene.

3 Shoot.

- Press the shutter button fully.

5

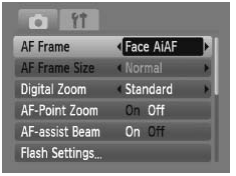
Getting More Out of Your Camera

This chapter serves as the advanced version of Chapter 4 and explains how to take pictures using various functions.

- This chapter assumes that the mode dial is set to **P** (p. 40).
- "★ Shooting Long Exposures" (p. 84) assumes you have set the mode dial to **SCN** and selected ★ mode.
- Before attempting to shoot using a function explained in this chapter in modes other than **P** mode, check if the function is available in those modes (pp. 120 – 123).

Changing the AF Frame Mode

You can change the AF (Auto Focus) frame mode to match the conditions you want to shoot.



Select [AF Frame].

- Press the MENU button, select the tab, select [AF Frame], then press the ◀▶ buttons to select an option.

Face AiAF

- Detects people's faces and sets the focus, exposure (evaluative metering only) and white balance (AWB only).
- When the camera is pointed at subjects, a white frame appears on the face the camera judges to be the main subject, and gray frames (max. 2) will appear on other faces. When the shutter button is pressed halfway, up to 9 green frames will appear on faces on which the camera focuses.

- If a face is not detected and only gray frames (no white frame) appear, up to 9 green frames will appear on the areas the camera focuses on when the shutter button is pressed halfway.
- Examples of faces that cannot be detected:
  - Subjects that are far away or extremely close.
  - Subjects that are dark or light.
  - Faces turned to the side or at a diagonal, or faces with a portion hidden.
- The camera may mistakenly identify non-human subjects as a face.
- If the camera cannot focus when you press the shutter button halfway, the AF frame will not appear.

Center

The AF frame is fixed at the center. This is effective for focusing on a specific point.

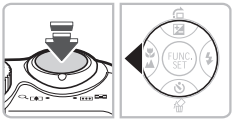
You can reduce the AF frame size

- Press the MENU button, select the tab, then select the [AF Frame Size] menu item and [Small] option.
- The setting is configured to [Normal] when the Digital Zoom (p. 58) or Digital Tele-Converter (p. 59) is used.

If the camera cannot focus when you press the shutter button halfway, the AF frame will turn yellow.

AFL Shooting with the AF Lock

The focus can be locked. After locking the focus, the focal distance will not change even when you release your finger from the shutter button.



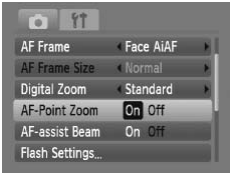
1 Lock the focus.

- Keep the shutter button pressed halfway and press the ◀ button.
- ▶ The focus locks and AFL is displayed on the screen.
- If you release your finger from the shutter button, and press the ◀ button once more, AFL will disappear and the focus will unlock.

2 Compose the scene and shoot.

Magnifying the Focal Point

If you press the shutter button halfway, the AF frame will magnify and you can check the focus.



1 Select [AF-Point Zoom].

- Press the MENU button and select [AF-Point Zoom] on the tab. Use the ◀▶ buttons to select [On].

2 Check the focus.

- Press the shutter button halfway.
- ▶ In [Face AiAF] (p. 76), the face selected as the main subject will appear magnified.
- ▶ In [Center] (p. 77), the contents of the center AF frame will appear magnified.

What if the display does not magnify?

The display will not appear magnified in [Face AiAF] if a face cannot be detected or is too big in relation to the screen. In [Center], it will not appear magnified if the camera cannot focus.

The magnified display will not appear when using the Digital Zoom (p. 58) or Digital Tele-Converter (p. 59), or when connected to a TV (p. 72).

Selecting the Person to Focus On (Face Select)

You can select a specific person's face to focus on and then shoot.

1 Set the Face Select mode.

- Point the camera toward the face and press the button.
- ▶ After [Face Select : On] displays, a face frame will appear around the face detected as the main subject.
- Even if the subject moves, the will follow the subject within a certain range.
- If a face is not detected, will not appear.

2 Select the face on which to focus.

- If you press the button, will move to another detected face.
- When the frame has made a full circuit of all detected faces, [Face Select : Off] will appear and the AF frame mode screen will reappear.

3 Shoot.

- Press the shutter button halfway. The face frame of the selected face will change into a green .
- Press the shutter button fully to shoot.

Confirming the number of detected faces

Keeping the button pressed will display the number of faces detected by the camera (35 at the most) (green: main subject's face, white: detected face).

Changing the Metering Mode

You can change the metering mode (brightness measuring function) to match the shooting conditions.

1 Select the metering mode.

- After pressing the (FUNC SET) button, press the ▲▼ buttons to select [ ].

2 Select an option.

- Press the ◀▶ buttons to select an option, then press the (FUNC SET) button.
- ▶ The setting will display on the screen.

[ ] Evaluative	Suitable for standard shooting conditions, including back lit shots. Automatically adjusts the exposure to match the shooting conditions.
[ ] Center Weighted Avg.	Averages the light metered from the entire frame, but gives greater weight to the center.
[ ] Spot	Only meters within the [ ] (Spot AE Point frame) that appears at the center of the screen.

AEL Shooting with the AE Lock

When you wish to take several shots with the same exposure, you can set the exposure and focus separately using the AE lock. AE stands for “Auto Exposure”.

1 Lock the exposure.

- Point the camera toward the subject and press the ▲ button while pressing the shutter button halfway.
- ▶ When AEL appears, the exposure will be set.
- If you release your finger from the shutter button and press the ▲ button again, AEL will disappear and the AE will unlock.

2 Compose the scene and shoot.

FEL Shooting with the FE Lock

Just as with the AE lock (p. 80), you can lock the exposure for shooting with the flash. FE stands for “Flash Exposure”.

1 Select ϟ (p. 64).

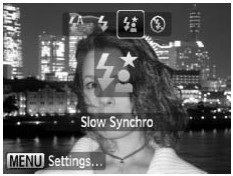
2 Lock the exposure.

- Point the camera toward the subject and press the ▲ button while pressing the shutter button halfway.
- ▶ The flash will fire and when FEL appears, the flash output will be retained.
- If you release your finger from the shutter button and press the ▲ button again, FEL will disappear and the FE will unlock.

3 Compose the scene and shoot.

Shooting with Slow Synchro

You can make the main subject, such as people, appear bright by having the camera provide the appropriate illumination with the flash. At the same time, you can use a slow shutter speed to brighten the background that the light from the flash cannot reach.



Select .

- After pressing the ▶ button, press the ◀▶ buttons to select . Then press the (FUNC. SET) button.
- ▶ Once set, will appear.
- Even if the flash fires, ensure that the subject does not move until the shutter sound ends.

Attach the camera to a tripod to prevent the camera from moving and blurring the image. It is recommended to set the [IS Mode] to [Off] when shooting with a tripod (p. 111).

Making Dark Subjects Appear Brighter (i-Contrast)

The camera can automatically detect and compensate for faces or subjects that appear dark in certain shooting conditions.

Select [i-Contrast].

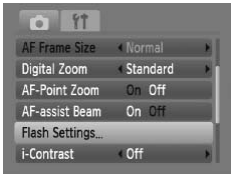
- Press the MENU button, select [i-Contrast] from the tab, and use the ◀▶ buttons to select [Auto].
- ▶ will appear.

Under some conditions, the image may appear coarse or the exposure setting may not be suitable.

You can correct recorded images (p. 99).

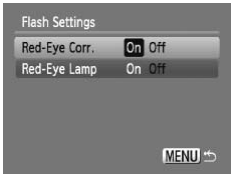
Red-Eye Correction

You can automatically correct red eyes in images taken with the flash.



1 Select [Flash Settings].

- Press the MENU button, select [Flash Settings] from the tab and press the (FUNC SET) button.



2 Adjust the setting.

- Press the ▲▼ buttons to select [Red-Eye Corr.] and press the ◀▶ buttons to select [On].
  - ⊙ will appear (p. 42).

Red-eye correction may be applied to other red parts than red eyes. For example, when red make-up has been used around eyes.

- You can correct recorded images (p. 100).
- If you press the ▶ button as shown on the screen in Step 2 and then press the MENU button, the Flash Settings screen will display.

Shooting Long Exposures

You can set the shutter speed to a range between 1 and 15 seconds to shoot long exposures. However, you should attach the camera to a tripod to prevent the camera from moving and blurring the image.

1 Select .

- Set the mode dial to **SCN** and press the (FUNC SET) button.
- Press the ▲▼ buttons to select .
- Press the ◀▶ buttons to select , then press the (FUNC SET) button.

2 Select the shutter speed.

- After pressing the ▲ button, press the ◀▶ buttons to select a shutter speed, then press the (FUNC SET) button.

3 Confirm the exposure.

- When you press the shutter button halfway, the exposure for the selected shutter speed will appear.

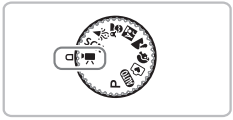
- The brightness of the image may differ from the brightness of the screen in Step 3 when the shutter button was pressed halfway.
- When shutter speeds of 1.3 seconds or slower are used, images are processed to eliminate noise after being taken. A certain amount of processing time may be needed before you can take the next shot.
- It is recommended to set the [IS Mode] to [Off] when shooting with a tripod (p. 111).

If the flash fires, the image may be overexposed. If this happens, set the flash to and shoot.

6

Using Various Functions for Shooting Movies

This chapter provides more advanced information than the "🎥 Shooting Movies" and "Viewing Movies" sections of Chapter 1.



- This chapter assumes that the mode dial is set to 🎥 (p. 40).

Changing the Image Quality

You can select from among three image quality settings.

1 Select the image quality.

- After pressing the (FUNC SET) button, press the ▲▼ buttons to select 640.

2 Select an option.

- Press the ◀▶ buttons to select an option, then press the (FUNC SET) button.
- ▶ The setting will display on the screen.

Image Quality Table

Image Quality (Recording Pixels/Frame Rate)	Content
640 640 x 480 pixels, 30 frames/sec.	For shooting standard quality movies.
640 LP 640 x 480 pixels, 30 frames/sec. LP	The image quality will be lower than with 640, but you can record twice the length.
320 320 x 240 pixels, 30 frames/sec.	Since the number of the recording pixels is smaller, the image quality will be lower than with 640, but you can record three times the length.

Estimated Shooting Time

Image Quality (Frame Rate)	Shooting Time		
	128 MB	2 GB	8 GB
640	1 min. 4 sec.	16 min. 47 sec.	1 hr. 7 min. 6 sec.
640 LP	2 min. 7 sec.	33 min. 2 sec.	2 hrs. 12 min. 3 sec.
320	3 min. 1 sec.	46 min. 33 sec.	3 hrs. 6 min. 4 sec.

- Based on Canon's testing standards.
- Recording will automatically stop when either the clip file size reaches 4 GB or the recording time reaches approximately 1 hour.
- Recording may stop even if the maximum clip length has not been reached on some memory cards. SD Speed Class 4 or higher memory cards are recommended.

AE Lock/Exposure Shift

In 🎥 mode, you can set the exposure or change it in 1/3 steps within a range of ±2.

1 Focus.

- Press the shutter button halfway to focus.

2 Lock the exposure.

- Press the ▲ button to lock the exposure. The exposure shift bar appears.
- Press the ▲ button again to release the lock.

3 Change the exposure.

- While looking at the screen, press the ◀▶ buttons to adjust the brightness.

4 Shoot.

Other Shooting Functions

The following functions can be used in the same way as for still images.

- **Zooming in More Closely on Subjects (Digital Zoom) (p. 58)**
  You can use the digital zoom, but the optical zoom cannot be used.
  If you want to shoot at the maximum zoom factor, you should adjust the optical zoom to the maximum before shooting.
  The sound of the zoom will be recorded.
- **Using the Self-Timer (p. 60)**
- **Shooting Close-ups (Macro) (p. 65)**
- **Shooting Far Away Subjects (Infinity) (p. 65)**
- **Adjusting the White Balance (p. 70)**
- **Changing the Tone of an Image (My Colors) (p. 71)**
- **Shooting Using a TV Monitor (p. 72)**
- **Shooting Using the Two Second Self-Timer (p. 72)**
- **AFL Shooting with the AF Lock (p. 77)**
- **Turning off the AF Assist Beam (p. 109)**

- **Displaying the Overlay (p. 111)**
  [3:2 Guide] is not available.
- **Changing the IS-Mode Settings (p. 111)**
  You can switch between [Continuous] and [Off].
- **Registering Functions to the Button (p. 112)**

Playback Functions

The following functions can be used in the same way as for still images.

- **Erasing Images (p. 24)**
- **Searching Images by Sets of 9 (Index Display) (p. 90)**
- **Searching for Images Using the Jump Display (p. 91)**
- **Viewing Slideshows (p. 92)**
- **Changing Image Transitions (p. 94)**
- **Viewing Images on a TV (p. 95)**
- **Protecting Images (p. 96)**
- **Erasing All Images (p. 97)**
- **Rotating Images (p. 97)**

Summary for "Viewing Movies" (p. 31)

	Exit
▶	Playback
▶	Slow Motion Playback (you can use the ◀▶ buttons to adjust the speed. Sound will not play back.)
⏮	Display the first frame
◀	Previous frame (Rewind if you hold down the (FUNC SET) button.)
▶	Next frame (Fast forward if you hold down the (FUNC SET) button.)
⏭	Display the last frame
	Displays when connected to a PictBridge compliant printer (p. 25). Refer to the *Personal Printing Guide* for details.

7

Using Playback and Other Functions

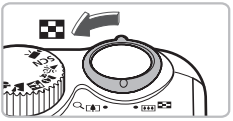
The first part of this chapter explains various ways to play back and edit images. The latter part explains how to specify images for printing.

- Press the [▶] button to select the Playback mode before operating the camera.

- It may not be possible to play back or edit images that have been edited on a computer, had their file name changed, or have been taken on a different camera.
- The edit function (pp. 98 – 100) cannot be used if the memory card does not have free space available.

Searching Images by Sets of 9 (Index Display)

Displaying 9 images at a time lets you quickly find the image you want.



1 Move the zoom lever toward .

▶ Images will display in an index. The selected image will have a green frame and be enlarged.

2 Select an image.

- Press the ▲▼◀▶ buttons to select an image.
- Moving the zoom lever toward Q will display the selected image by itself.

Searching 9 Images at a Time

Jump Bar

1 Move the zoom lever toward .

▶ Images will display in an index.

2 Move the zoom lever toward again.

▶ The jump bar appears.

3 Change the displayed images.

- Press the ◀▶ buttons to switch between sets of 9 images.
- Moving the zoom lever toward Q restores the index display.

When the jump bar displays, holding the (FUNC SET) button and pressing the ◀▶ buttons jumps to the first or last set of images.

Searching for Images Using the Jump Display

When there are many images on the memory card, you can search them by a specified method or image unit.

Position of currently displayed image

1 Select a jump method.

- In Single Image Playback, press the ▲ button.
- The search method and the position of the currently displayed image will appear at the bottom of the screen.
- Press the ▲▼ buttons to select the desired search method.

2 Jump to an image.

- Press the ◀▶ buttons.
- The camera will use the selected search method to jump to an image.
- To return to Single Image Playback, press the MENU button.

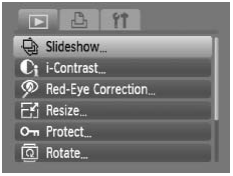
Jump 10 Images	Jumps over 10 images at a time.
Jump 100 Images	Jumps over 100 images at a time.
Jump Shot Date	Jumps to the first image in each shooting date group.
Jump to Movie	Jumps to a movie.
Jump to Folder	Jumps to the first image in each folder.

- The number of images matching the search filter will display on the right side of the screen except for and .

If there are no images matching the search filter, the ◀▶ buttons will not function.

Viewing Slideshows

You can automatically play back images recorded to a memory card. Each image displays for approximately 3 seconds.



1 Select [Slideshow].

- Press the MENU button and select the ▶ tab, then select [Slideshow] and press the (FUNC SET) button.

2 Select a transition effect and start the slideshow.

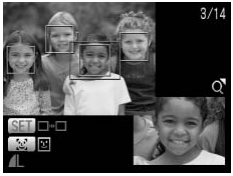
- Press the ◀▶ buttons to select a transition effect, then press the (FUNC SET) button.
- ▶ The slideshow will start a few seconds after [Loading image…] displays.
- You can pause/restart a slideshow by pressing the (FUNC SET) button again.
- Press the MENU button to stop the slideshow.

	Switches between images without transition effect.
	Fades one image out and the next in.
	The image slides out to the left and the next image appears.

- If you press the ◀▶ buttons during playback, the image will switch. If you press and hold down the ◀▶ buttons you can fast-forward through images.
- The power saving function does not work during slideshows (p. 41).

Checking the Focus

You can magnify the area of a recorded image that was inside the AF frame or the area of a face that was detected to check the focus.



1 Press the DISP. button, and switch to the focus check display (p. 43).

- A white frame will appear where the AF frame or face was when the focus was set.
- A gray frame will appear on a face detected during playback.
- The area within the orange frame appears magnified.

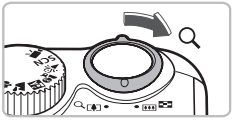
2 Switch frames.

- Press the [ ] button to switch between frames of detected faces.
- Press the (FUNC SET) button to switch between frames other than those of detected faces.

3 Change the magnification level or location.

- Move the zoom lever toward Q once.
- Use the zoom lever to change the display size, and the ▲▼◀▶ buttons to change the display position while checking the focus.
- Pressing the MENU button resets the display to Step 2.

Magnifying Images



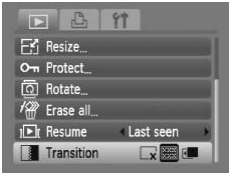
Approximate Location of Displayed Area

Move the zoom lever toward Q.

- The display will zoom in on the image and SET will appear. If you continue to hold the zoom lever, it will continue to zoom in up to a factor of 10x.
- If you press the ▲▼◀▶ buttons, you can move the location of the displayed area.
- Move the zoom lever toward ▪ to zoom out or return to Single Image Playback.
- When SET appears on the screen, press the FUNC SET button to switch to SET. Press the ◀▶ buttons to switch between images at the same level of magnification. Press the FUNC SET button again to return to SET.

Changing Image Transitions

You can select from three transition effects when switching between images in single image playback.



Select [Transition].

- Press the MENU button and select the ▶ tab, then select [Transition] and use the ◀▶ buttons to select a transition effect.
- Press the MENU button to accept the setting.

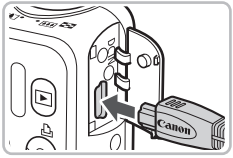
	Switches between images without a transition effect.
	Fades one image out and the next in.
	Slides images left or right when the ◀▶ buttons are pressed.

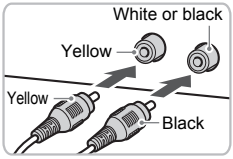
Viewing Images on a TV

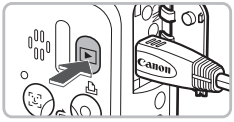
Using the supplied AV cable, you can connect the camera to a TV to view images you have shot.

Items to Prepare

- Camera and TV
- AV cable supplied with the camera (p. 2)







1 Turn off the camera and TV.

2 Connect the camera to the TV.

- Open the camera's terminal cover and fully insert the plug of the supplied AV cable into the camera's A/V OUT terminal.
- Insert the cable plug fully into the video input terminals as shown in the illustration.

3 Turn on the TV and switch it to the input to which the cable is connected.

4 Turn on the camera.

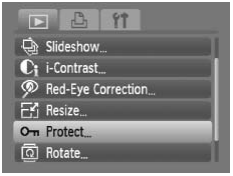
- Press the [▶] button to turn on the camera.
- ▶ The image will appear on the TV (nothing will appear on the monitor of the camera).
- After you finish viewing, turn off the camera and TV, and unplug the AV cable.

What if the images don't properly display on the TV?

Images will not display correctly if the camera's video output setting (NTSC/PAL) does not match the TV system. Press the MENU button, select the tab and [Video System] to switch to the correct video system.

Protecting Images

You can protect important images so that they cannot be erased by the camera (pp. 24, 28, 97).



1 Select [Protect].

- Press the MENU button, select the ▶ tab and [Protect], and then press the (FUNC. SET) button.

2 Protect the image.

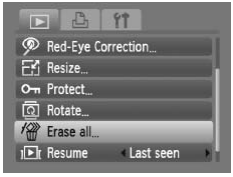
- Press the ◀▶ buttons to select an image, then press the (FUNC. SET) button.
- ▶ Once protected, 🔑 will appear.
- Pressing the (FUNC. SET) button again deselects the image and 🔑 will disappear.
- To protect additional images, repeat the above procedure.
- Pressing the MENU button will restore the menu screen.

If you format the memory card (p. 49), protected images will also be erased.

Protected images cannot be erased with the camera's erase function. To erase an image, cancel protection first.

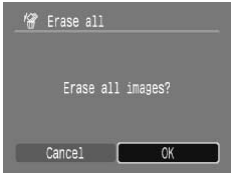
Erasing All Images

You can select and erase all images at once. Since erased images cannot be recovered, exercise adequate caution before erasing. Protected images (p. 96) cannot be erased.



1 Select [Erase all].

- Press the MENU button, select the ▶ tab and [Erase all], and press the (FUNC SET) button.

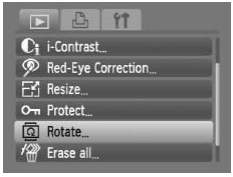


2 Erase all images.

- Press the ◀▶ buttons to select [OK], then press the (FUNC SET) button.
- ▶ All images will be erased.
- Pressing the MENU button will restore the menu screen.

Rotating Images

You can change the orientation of an image and save it.



1 Select [Rotate].

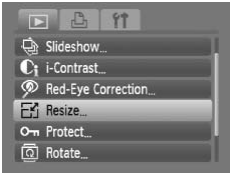
- Press the MENU button and select the ▶ tab, then select [Rotate] and press the (FUNC SET) button.

2 Rotate the image.

- Press the ◀▶ buttons to select an image.
- The image will rotate 90° with each press of the (FUNC SET) button.
- Pressing the MENU button will restore the menu screen.

Resizing Images

You can resize images to a lower pixel setting and save the resized image as a separate file.



1 Select [Resize].

- Press the MENU button and select the ▶ tab, then select [Resize] and press the (FUNC SET) button.

2 Select an image.

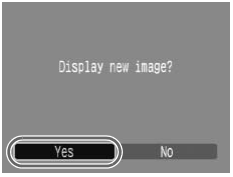
- Press the ◀▶ buttons to select an image, then press the (FUNC SET) button.

3 Select an image size.

- Press the ◀▶ buttons to select a size, then press the (FUNC SET) button.
- ▶ The [Save new image?] screen will appear.

4 Save the new image.

- Press the ◀▶ buttons to select [OK], then press the (FUNC SET) button.
- ▶ The image will be saved as a new file.



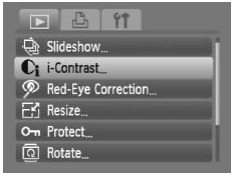
5 Display the new image.

- When you press the MENU button, the [Display new image?] screen will appear. If you press the ◀▶ buttons, select [Yes] and press the (FUNC SET) button, the saved image will display.

- You cannot resize an image to a larger size.
- You cannot resize images taken with the W and XS settings.

Making Dark Subjects Appear Brighter (i-Contrast)

Detects and compensates for dark sections of subjects or people's faces and saves the image as a separate file. You can select 4 levels of correction: [Auto], [Low], [Medium] or [High].



1 Select [i-Contrast].

- Press the MENU button, select the ▶ tab and [i-Contrast], then press the (FUNC SET) button.

2 Select an image.

- Press the ◀▶ buttons to select an image, then press the (FUNC SET) button.

3 Select a menu item.

- Press the ◀▶ buttons to select an option, then press the (FUNC SET) button.

4 Save as a new image and display.

- Perform Steps 4 and 5 on p. 98.

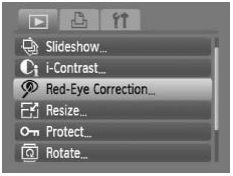
What if the image wasn't corrected by the [Auto] option as well as you would like?

Select [Low], [Medium] or [High] and adjust the image.

- Under some conditions, the image may appear coarse or the exposure setting may not be suitable.
- Repeatedly adjusting the same image may cause the quality to deteriorate.

Correcting the Red-Eye Effect

You can automatically correct red eyes in images and save them as new files.



1 Select [Red-Eye Correction].

- Press the MENU button, select the ▶ tab and [Red-Eye Correction], then press the (FUNC SET) button.
- ▶ The [Red-Eye Correction] screen will appear.

2 Select an image.

- Press the ◀▶ buttons to select an image.

3 Correct the image.

- When you press the (FUNC SET) button, red-eye detected by the camera will be corrected and a frame will appear around the corrected portion.
- You can zoom the image using the procedures in "Magnifying Images" (p. 94).

4 Save as a new image and display.

- Press the ▲▼◀▶ buttons to select [New File], then press the (FUNC SET) button.
- ▶ The image will be saved as a new file.
- Perform Step 5 on p. 98.

- Some images may not be properly corrected.
- When [Overwrite] in Step 4 is selected, the uncorrected image is overwritten with the corrected data, erasing the original image.
- Protected images cannot be overwritten.

Printing from the Print List (DPOF)

You can add images to the print list (DPOF) directly after shooting or while in playback by pressing the 🖨 button. You can print from a print list simply by connecting your camera and printer. These selection methods comply with the DPOF (Digital Print Order Format) standards.

Easily Add Images to the Print List with 🖨

1 Select an image.

- Press the ◀▶ buttons to select an image (excluding movies).

2 Press the 🖨 button.

3 Print list.

- Press the ▲▼ buttons to set the number of prints.
- Press the ◀▶ buttons to select [Add], then press the (FUNC SET) button.
  - Once added, 🖨 will appear.
- To remove an image from the print list, select the added image and press the 🖨 button, then press the ◀▶ buttons to select [Remove] and press the (FUNC SET) button.

Print Added Images

The following examples use the Canon SELPHY series printers. Please also refer to the *Personal Printing Guide*.

1 Connect the camera to the printer (p. 25).

2 Print.

- Press the ▲▼ buttons, select [Print now] and press the (FUNC SET) button.
  - Printing will start.
- If you stop the printer during printing and start again, it will start from the next print.

Selecting Images for Printing (DPOF)

You can select certain images on a memory card for printing (up to 998 images) and specify the number of print copies so they can be printed together or processed at a photo developer service. You can then print all the selected images at once or take the memory card to a photo developer to order prints. These selection methods comply with the DPOF (Digital Print Order Format) standards.

Print Settings

You can set the print type, date and file number. These settings apply to all images selected for printing.

1 Select [Print Settings].

- Press the MENU button and select the tab, then select [Print Settings] and press the FUNC SET button.

2 Adjust the settings.

- Press the ▲▼ buttons to select a menu item, then use the ◀▶ buttons to select an option.
- ▶ Pressing the MENU button accepts the settings and restores the menu screen.

Print Type	Standard	Prints one image per page.
	Index	Prints several reduced size images per page.
	Both	Prints both standard and index formats.
Date	On	Prints the date from the shooting information.
	Off	–
File No.	On	Prints the file number.
	Off	–
Clear DPOF data	On	Removes all print settings after printing.
	Off	–

- Some printers or photo developer services may not be able to reflect all of the print settings in the output.
- ! may display when using a memory card with print settings set by a different camera. These settings will be overwritten by those set by your camera.
- Images with the date embedded always print with the date, regardless of the [Date] setting. As a result, some printers may print the date twice on these images if [Date] is also set to [On].

- With [Index] selected, the [Date] and [File No.] options cannot be set to [On] at the same time.
- The date will be printed in the style set in the [Date/Time] function in the tab (p. 16).

Selecting the Number of Copies

1 Select [Select Images & Qty.].

- Press the MENU button and select the tab, then select [Select Images & Qty.] and press the (FUNC SET) button.

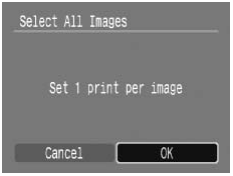
2 Select an image.

- Press the ◀▶ buttons to select an image, then press the (FUNC SET) button.
- ▶ You will be able to set the number of print copies.
- If you select [Index], ✓ appears.
- Press the (FUNC SET) button again to deselect the images. ✓ will disappear.

3 Set the number of prints.

- Press the ▲▼ buttons to set the number of prints (max. 99).
- Repeat Steps 2 and 3 to select other images and the number of prints for each.
- You cannot set the number of print copies for Index prints. You can only select which images to print.
- ▶ Pressing the MENU button accepts the settings and restores the menu screen.

Set All Images to Print Once



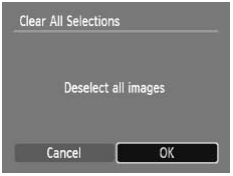
1 Select [Select All Images].

- Select [Select All Images] from the screen in Step 1 on p. 103 and press the (FUNC SET) button.

2 Make print settings.

- Press the ◀▶ buttons to select [OK], then press the (FUNC SET) button.
- ▶ All images will be set to print once.

Clearing All Selections



1 Select [Clear All Selections].

- Select [Clear All Selections] in Step 1 on p. 103, and press the (FUNC SET) button.

2 All selections will be cleared.

- Press the ◀▶ buttons to select [OK], then press the (FUNC SET) button.
- ▶ All selections will be cleared.

8

Customizing the Camera

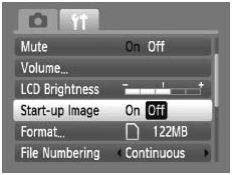
You can customize various functions to suit your shooting preferences. The first part of this chapter explains convenient and commonly used functions. The latter part explains how to change shooting and playback settings to suit your purposes.

Changing Functions

You can customize convenient and commonly used functions from the tab (p. 46).

Turning Off the Start-up Image

You can turn off the start-up image that displays when you turn on the camera.



- Select [Start-up Image], then press the ◀▶ buttons to select [Off].

Turning off the Power Saving Function

You can set the power saving function (p. 41) to [Off]. Setting it to [On] is recommended to save battery power.

- Select [Power Saving], then press the (FUNC SET) button.
- Press the ▲▼ buttons to select [Auto Power Down], then use the ◀▶ buttons to select [Off].
- If you set the Power Saving function to [Off], be careful not to forget to turn off the camera after use.

Setting the Screen Shut-Off Time

You can adjust the time the screen takes to shut off automatically (p. 41). This also works when [Auto Power Down] is set to [Off].

- Select [Power Saving], then press the (FUNC SET) button.
- Press the ▲▼ buttons to select [Display Off], then use the ◀▶ buttons to select a time.
- In order to save battery power, it is recommended to select less than [1 min.].

Changing the File Number Assignment

Images you shoot are automatically assigned file numbers in the order they were taken, from 0001 – 9999, and saved to folders of up to 2,000 images. You can change the file number assignment.

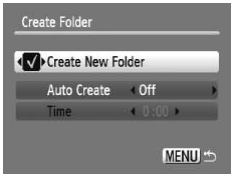
- Select [File Numbering], then press the ◀▶ buttons to select an option.

Continuous	Even if you shoot using a new memory card, the file numbers are assigned consecutively until an image with the number 9999 is taken/saved.
Auto Reset	If you replace the memory card with a new one, file numbering begins with 0001 again.

- If you use a memory card already containing images, the newly assigned file numbers may continue the existing numbering for both the [Continuous] and [Auto Reset] settings. If you want to start over with file number 0001, format the memory card before use (p. 49).
- Refer to the *Software Starter Guide* for information regarding folder structure or image types.

Creating a Folder

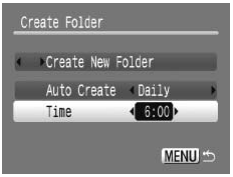
You can create new folders in which to save images.



- Select [Create Folder], then press the (FUNC SET) button.
- Select [Create New Folder], then press the ◀▶ buttons to select ✓.
- will display on the screen (p. 42) when shooting, and shots will be recorded into a new folder.

Creating Folders by Day and Time

You can set a day and time for folder creation.



- Select [Create Folder], then press the (FUNC SET) button.
- Select [Auto Create], then press the ◀▶ buttons to select an interval.
- Select [Time], then press the ◀▶ buttons to set a time.
- The new folder will be created on the set day and time. Images shot after the creation date are saved to the new folder.

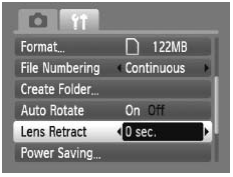
Turning off Auto Rotate

When you play back images on the camera or a computer, images shot in vertical orientation automatically rotate and display vertically. You can turn off this function.

- Select [Auto Rotate], then press the ◀▶ buttons to select [Off].

Changing the Lens Retract Time

For safety reasons, the lens retracts about 1 minute after pressing the ▶ button when in a shooting mode (p. 23). You can set the retraction time to [0 sec.].



- Select [Lens Retract], then press the ◀▶ buttons to select [0 sec.].

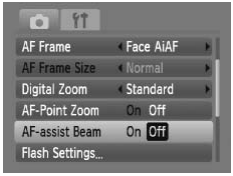
Changing Shooting Functions

If you set the mode dial to **P**, you can change the settings in the tab (p. 46).

Before attempting to shoot using a function explained in this chapter in modes other than **P** mode, check if the function is available in those modes (pp. 122 – 123).

Turning off the AF Assist Beam

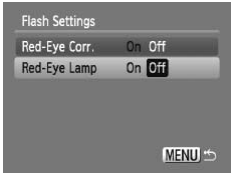
If the camera cannot focus in low light conditions when you press the shutter button halfway, the lamp will automatically light to assist focusing. You can turn off the lamp.



- Select [AF-assist Beam], then press the ◀▶ buttons to select [Off].

Turning off the Red-Eye Reduction Function

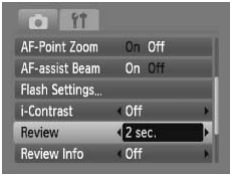
The red-eye reduction lamp lights in order to reduce the red-eye effect that occurs when shooting in dark conditions with the flash. You can turn off this function.



- Select [Flash Settings], then press the (FUNC SET) button.
- Press the ▲▼ buttons to select [Red-Eye Lamp], then press the ◀▶ buttons to select [Off].

Changing the Image Display Time

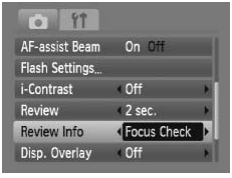
You can change the length of time the images display directly after shooting.



- Select [Review], then press the ◀▶ buttons to select an option.
- If you select [Off], the image will not display.
- If you select [Hold], the image displays until you press the shutter button halfway.

Changing the Image Display Right After Shooting

You can change the image display that appears after shooting.

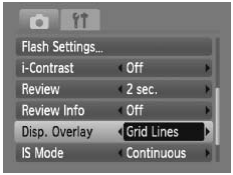


- Select [Review Info], then press the ◀▶ buttons to select an option.

Detailed	Displays detailed information (p. 43).
Focus Check	The area inside the AF frame is magnified, allowing you to check the focus. The procedure is the same as in “Checking the Focus” (p. 93).

Displaying the Overlay

You can display gridlines for vertical and horizontal guidance, or a 3:2 guide to confirm the printable area for L size or postcard size prints.

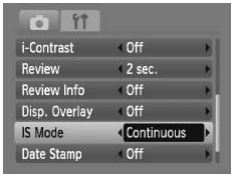


- Select [Disp. Overlay], then press the ◀▶ buttons to select an option.

Grid Lines	A grid overlays the display.
3:2 Guide	Gray areas appear at the top and bottom of the screen. These areas will not print when printing on 3:2 aspect ratio paper.
Both	Both grid lines, and the 3:2 guide will display.

- In W mode, you cannot set [3:2 Guide] or [Both].
- Grid Lines will not be recorded on the image.
- The gray areas displayed with [3:2 Guide] are the areas that will not be printed. The actual image recorded will include the portion in the gray areas.

Changing the IS-Mode Settings



- Select [IS Mode], then press the ◀▶ buttons to select an option.

Continuous	Image stabilization is always on. You can confirm the result directly on the display, which makes it easier to check the composition or focus.
Shoot Only	Image stabilization is only active at the moment of shooting.
Panning	Image stabilization only counters up and down motion. This option is recommended for shooting objects moving horizontally.

- If camera shake is too strong, attach the camera to a tripod. It is recommended to set the IS Mode to [Off] when the camera is fixed to a tripod.
- When using [Panning], hold the camera horizontally. Image stabilization does not work when the camera is held vertically.

Registering Functions to the 🖨 Button

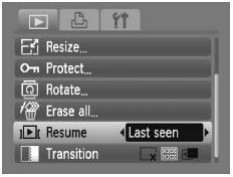
- Select [Set 🖨 button], then press the (FUNC SET) button.
- Press the ▲▼◀▶ buttons to select the function to register, then press the (FUNC SET) button.
- Pressing the 🖨 button will call up the registered function.

- Press 🖨× if you want to cancel a function.
- When this ⊘ symbol is shown on the bottom right of an icon, the function cannot be used in the current shooting mode or function setting.
- In 📷, each press of the 🖨 button records white balance data (p. 70), and the white balance settings also change to 📷.

Changing Playback Functions

You can adjust the settings in the ▶ tab by pressing the ▶ button (p. 46).

Selecting the Image that First Displays in Playback



- Select [Resume], then press the ◀▶ buttons to select an option.

Last seen	Resumes with the image last viewed.
Last shot	Resumes with the most recently shot image.

9

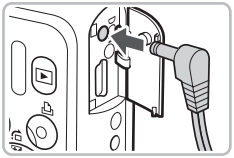
Useful Information

This chapter introduces how to use the AC adapter kit (sold separately), troubleshooting tips, and contains lists of available camera functions. The index also appears at the end.

Using Household Power

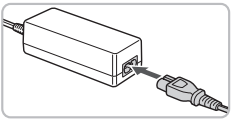
If you use AC Adapter Kit ACK800 (sold separately), you can use the camera without worrying about how much charge is left in the batteries.

1 Turn off the camera.



2 Plug the cord into the camera.

- Open the cover and fully insert the adapter plug into the camera.



3 Connect the power cord.

- Connect the power cord to the compact power adapter, then plug the other end into a power outlet.
- You can turn the camera on to use it.
- After you finish, turn off the camera and unplug the power cord from the power outlet.

Do not unplug the power cord or adapter plug with the camera turned on. This could erase images you have taken or damage the camera.

Troubleshooting

If you think there is a problem with the camera, first check the following. If the items below do not solve your problem, contact a Canon Customer Support Help Desk as listed on the included customer support list.

Power

You pressed the power button, but nothing happened.

- Confirm that the batteries are properly inserted (p. 12).
- Confirm that the batteries are not depleted (p. 14).
- Confirm that the memory card/battery cover is securely closed (p. 13).
- If the battery terminals are dirty, battery performance will decrease. Clean the terminals with a cotton swab and re-insert the batteries several times.

Batteries are consumed quickly.

- Battery performance decreases at low temperatures. Warm the batteries by, for example, placing them in your pocket, taking care that the terminals do not come into contact with any metal objects.

Lens will not retract.

- Do not open the memory card/battery cover while the power is on. After closing the memory card/battery cover, turn the power on then back off (p. 13).

TV output

Image is distorted or not showing on TV (p. 95).

Shooting

Cannot shoot.

- Set the mode dial to AUTO (p. 40).
- Press the shutter button halfway (p. 19) in playback mode (p. 23).

Screen does not display properly in dark places (p. 44).

Screen does not display properly while shooting.

Please note, the following will not be recorded in still images, but will be recorded in movies.

- When the camera is subjected to powerful light sources, the display may darken.
- Under fluorescent lighting, the screen may flicker.
- When shooting bright light sources, a bar of light (purplish red) may appear.

The screen turns off and you cannot shoot when you press the shutter button halfway (p. 22).

appears when the shutter button was pressed halfway (p. 56).

- Set [IS Mode] to [Continuous] (p. 111).
- Set the flash to ⚡ (p. 64).
- Increase the ISO speed (p. 69).
- Attach the camera to a tripod.

Image is blurred.
- Press the shutter button halfway to focus, then shoot (p. 19).
- Shoot the subject within the focusing distance (p. 126).
- Set the [AF-assist Beam] to [On] (p. 109).
- Confirm that functions which you do not intend to use (macro, etc.) are not set.
- Shoot using the focus lock or AF lock (pp. 74, 77).

Even when you press the shutter button halfway, the AF frame does not appear, and the camera does not focus.
- If you center on the light and dark contrasting area of the subject and push the shutter button halfway, or repeatedly push the shutter button halfway, the frame will appear and the camera will focus.

Subject is too dark.
- Set the flash to ϟ (p. 64).
- Adjust the brightness with exposure compensation (p. 68).
- Adjust the brightness with the i-Contrast function (pp. 82, 99).
- Use the AE lock, or spot metering to shoot (p. 80).

Subject is too bright (overexposed).
- Set the flash to ⊗ (p. 56).
- Adjust the brightness with exposure compensation (p. 68).
- Use the AE lock, or spot metering to shoot (p. 80).
- Reduce the light illuminating the subject.

Image is dark even though the flash fired (p. 22).
- Increase the ISO speed (p. 69).
- Shoot within an appropriate distance for flash photography (p. 64).

Image taken using the flash is too bright (overexposed).
- Shoot within an appropriate distance for flash photography (p. 64).
- Set the flash to ⊗ (p. 56).

White dots appear on the image when shooting with the flash.
- Light from the flash has reflected off dust particles or other objects in the air.

Image appears rough or grainy.
- Shoot with the ISO speed on a lower setting (p. 69).
- Depending on the shooting mode, when shooting in a high ISO speed the image may appear rough or grainy (pp. 53, 55).

Eyes appear red (p. 83).
- Set the [Red-Eye Lamp] to [On] (p. 109). When shooting with the flash, the lamp (on the front of the camera) lights (p. 40), and for approximately 1 second while the camera is reducing red-eye, it is not possible to shoot. It is more effective if the subject is looking directly at the lamp. Even better results can be obtained by increasing the lighting in indoor settings or approaching closer to the subject.

Recording images to the memory card takes a long time, or continuous shooting slows down.
- Perform a low-level format of the memory card in the camera (p. 49).

When you can't make settings for shooting functions or FUNC. menu.
- The items in which settings can be made differ depending on the shooting mode. Refer to "Functions Available in Each Shooting Mode" (pp. 120 – 121).

Cannot operate buttons.
- When the mode dial is set to [♥], some buttons cannot be used (p. 27).

Shooting movies

Correct shooting time does not display, or stops.
- Format the memory card in the camera, or use a memory card capable of recording at high speeds. Even when the shooting time does not display properly, the video recorded will be the length that it was actually shot (pp. 30, 49).

"!" displayed on the LCD monitor, and shooting ended automatically.

Camera's internal memory was insufficient. Try one of the following.
- Perform a low-level format of the memory card in the camera (p. 49).
- Lower the recorded pixels (p. 86).
- Use a memory card capable of recording at high speeds.

Zoom does not operate.
- You can use the digital zoom while recording, but not the optical zoom (p. 87).

Playback

Cannot play back images or movies.
- If the file name or folder structure is changed on a computer, you may not be able to play back images or movies. Refer to the *Software Starter Guide* for information regarding folder structure or file names.

Playback stops, or audio cuts out.
- Use a card that has been formatted on this camera (p. 49).
- If you copy a movie to a memory card that reads slowly, playback may interrupt momentarily.
- Depending on its capabilities, the computer may drop frames, or the audio may cut out, when playing movies.

Cannot operate buttons.
- When the mode dial is set to [♥], some buttons cannot be used (p. 28).

List of Messages that Appear on the Screen

If error messages appear on the LCD monitor, try one of the following solutions.

No memory card

- The memory card is not installed in the correct direction. Install the memory card in the correct direction (p. 12).

Card locked!

- The SD memory card or SDHC memory card's write protect tab is set to "Lock". Unlock the write protect tab (p. 15).

Cannot record!

- You attempted to shoot an image without a memory card, or with a memory card installed incorrectly. Install the memory card in the correct direction when shooting (p. 12).

Memory card error (p. 50)

- If this error message appears even when using the supplied memory card, contact your Canon Customer Support Help Desk as there may be a problem with the camera.

Memory card full

- There is not enough free space on the memory card to shoot (pp. 20, 51, 63, 75) or edit images (pp. 98 – 100). Erase the images (pp. 24, 97) to open space for new images, or insert an empty memory card (p. 12).

Change the batteries (p. 12)

No image.

- There are no images recorded on the memory card that can be displayed.

Protected! (p. 96)

Unidentified Image/Incompatible JPEG/Image too large./RAW

- Unsupported images or data, or corrupted image data cannot be displayed.
- Images manipulated on a computer, that have had their file name changed, or have been taken with a different camera may not display.

Cannot magnify!/Cannot rotate/Cannot modify image/Unselectable image

- Incompatible images cannot be magnified (p. 94), rotated (p. 97), edited (pp. 98 – 100) or added to a print list (p. 102).
- Images manipulated on a computer, that have had their file name changed, or have been taken with a different camera may not be magnified, rotated, edited or added to a print list.
- Movies cannot be magnified (p. 94).

Too many marks.

- You selected more than 998 images to send in print settings. Select less than 998 images (p. 102).

Cannot complete!

- Print settings or transfer settings could not be saved correctly. Reduce the number of settings and try again (p. 102).

Naming error!

- The file name could not be created because there is an image with the same name as the folder that the camera is attempting to create, or the highest possible file number has already been reached (p. 107). In the menu, change [File Numbering] to [Auto Reset] (p. 107) or format the memory card (p. 49).

Communication error

- Images could not be transferred to the computer or printed due to the large amount of images (approx. 1000) stored on the memory card. Use a commercially available USB card reader to transfer the images to the computer. To print, insert the memory card into the printer's memory card slot.

Lens error, restart camera

- A lens error was detected. Press the power button to turn the camera off and back on (p. 40). If this error message continues to display, contact your Canon Customer Support Help Desk as there may be a problem with the lens.
- This error can occur if you hold the lens while it is in motion or when using it in a location with excessive dust or sand in the air.

Exx (xx: number)

- A camera error was detected. Press the power button to turn the camera off and back on (p. 40).
- If an error code displays directly after taking a picture, the shot may not have been recorded. Check image in playback mode.
- If this error code reappears, note the number and contact your Canon Customer Support Help Desk as there may be a problem with the camera.

Functions Available in Each Shooting Mode

Function	Shooting modes	P	AUTO	
Flash (pp. 56, 64, 81)	ϟ^{A}	○	○	○
	ϟ	○	—	—
	ϟ	○	—	—
	ϟ	○	○	○
Focusing Zone (p. 65)	All Range	—	○	○
		○	—	—
		○	—	—
		○	—	—
Exposure Compensation (p. 68)/Exposure Shift (p. 87)		○	—	—
Self-Timer Mode (pp. 60, 61, 72, 73)		○	○	—
		○	○	—
		○	○	—
	*2	○	○	—
AF Lock (p. 77)		○	—	—
AE Lock (pp. 80, 87)/FE Lock (p. 81)		○	—	—
TV Display (p. 72)		○	○	○
Face Selection (p. 79)		○	○	—
Screen Display (p. 42)	Information View	○	○	○
	No Information	○	○	—

FUNC. menu				
ISO Speed (p. 69)	ISO AUTO	○	○	○
	ISO 80 ISO 100 ISO 200 ISO 400 ISO 800 ISO 1600	○	—	—
White Balance (p. 70)	AWB	○	○	○
		○	—	—
My Colors (p. 71)		○	—	—
Metering System (p. 80)		○	○	○
		○	—	—
Drive Mode (p. 68)		○	—	—
Recording Pixels (pp. 66, 86)	L M1 M2 M3 S W	○	○	*4
	640 320	—	—	—
Image Quality (Compression Ratio) (p. 66)		○	○	*6

*1 ϟ when flash fires. *2 Possible settings: 0 – 30 seconds in [Delay], and 1 – 10 shots in [Shots]. *3 Fixed to ISO3200. *4 Fixed to L. *5 Fixed to M3. *6 Fixed to .

					SCN									
													ISO 3200	
○	*1	*1	○	○	*1	*1	—	—	○	—	○	○	—	—
○	*1	*1	○	○	*1	*1	—	*1	○	○	○	○	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
○	○	○	○	○	○	○	○	○	○	○	○	○	○	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
○	—	○	—	○	—	○	—	○	○	○	○	○	○	○
○	—	○	○	○	○	○	○	○	○	○	○	○	○	○
○	○	○	—	○	—	○	—	○	○	○	○	○	○	○
○	○	○	○	○	○	○	○	—	○	○	○	○	—	○
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
○	○	○	○	○	○	○	—	○	○	○	○	○	○	—
○	○	○	○	○	○	○	○	○	○	○	○	○	○	—
—	—	—	—	—	—	—	—	○	—	—	—	—	—	○
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
○	○	○	○	○	○	○	—	○	○	○	○	○	○	—
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

FUNC. menu														
○	○	○	○	○	○	○	○	—	○	○	○	○	*3	○
—	—	—	—	—	—	—	—	○	—	—	—	—		—
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
—	—	—	—	—	—	—	—	○	—	—	—	—	—	○
—	—	—	—	—	—	—	—	○	—	—	—	—	—	○
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
○	○	○	○	○	○	○	○	○	○	○	○	○	○	—
○	○	○	○	○	○	○	○	○	○	○	○	○	*5	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	○
○	○	○	○	○	○	○	○	○	○	○	○	○	○	—

○ Selectable or selected automatically — Not selectable

Menus

Shooting Menu

Function \ Shooting modes			P	AUTO	
AF Frame (p. 76)	Face AiAF		○	○	○
	Center		○	—	—
AF Frame Size (p. 77)	Normal/Small		○	—	—
Digital Zoom (p. 58)	On/Off		○	○	*2
	Digital Tele-Converter (1.5x/2.0x)		○	○	—
AF-Point Zoom (p. 78)	On/Off		○	○	—
AF-assist Beam (p. 109)	On/Off		○	○	*2
Flash Settings (pp. 83, 109)	Red-Eye Corr.	On/Off	○	○	—
	Red-Eye Lamp	On/Off	○	○	*2
i-Contrast (p. 82)	On/Off		○	○	*2
Review (p. 110)	Off/2 – 10 sec./Hold		○	○	*4
Review Info (p. 110)	Off/Detailed/Focus Check		○	○	—
Disp. Overlay (p. 111)	Off/Grid Lines		○	○	—
	3:2 Guide/Both		○	○	—
IS Mode (p. 111)	On/Off		○	*2	*2
	Shoot Only/Panning		○	—	—
Date Stamp (p. 57)	Off/Date/Date & Time		○	○	—
Set 🖨 button (p. 112)			○	○	—

*1 AiAF *2 Always [On]. *3 Only when the flash is set to ϟ. *4 Fixed to [2 sec.].

					SCN									
													ISO 3200	
O	O	O	O	O	O	O	—	O	O	O	O	O	O	*1
O	O	O	O	O	O	O	O	O	O	O	O	O	O	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
O	O	O	O	O	O	O	O	O	O	O	O	O	—	O
O	O	O	O	O	O	O	O	O	O	O	O	O	—	—
O	O	O	O	O	O	O	O	O	O	O	O	O	O	—
O	O	O	O	O	O	O	—	O	O	*3	O	O	O	O
O	O	O	O	O	O	O	—	O	O	O	O	O	—	—
O	O	O	O	O	O	O	—	O	O	O	O	O	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
O	O	O	O	O	O	O	O	O	O	O	O	O	O	—
O	O	O	O	O	O	O	O	O	O	O	O	O	O	—
O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
O	O	O	O	O	O	O	O	O	O	O	O	O	O	—
O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
O	O	O	O	O	O	O	O	O	O	O	O	O	O	—
O	O	O	O	O	O	O	O	O	O	O	O	O	—	—
O	O	O	O	O	O	O	O	O	O	O	O	O	O	O

O Selectable or selected automatically — Not selectable

Set up Menu

Item	Options/Summary	Ref. Page
Mute	On/Off*	p. 47
Volume	Set all operation sounds (5 levels).	p. 47
LCD Brightness	Set within a range of ±2.	p. 50
Start-up Image	On*/Off	p. 106
Format	Formats card, erasing all data	p. 49
File Numbering	Continuous*/Auto Reset	p. 107
Create Folder	Create New Folder/Auto Create	pp. 107, 108
Auto Rotate	On*/Off	p. 108
Lens Retract	1 min.*/0 sec.	p. 108
Power Saving	Auto Power Down: On*/Off Display Off: 10, 20 or 30 sec./1*, 2 or 3 min.	pp. 41, 106
Date/Time	Date and time settings	p. 17
Video System	NTSC/PAL	p. 95
Language	Select displayed language.	p. 18
Reset All	Returns camera to default settings.	p. 48

* Default setting

Playback Menu

Item	Options/Summary	Ref. Page
Slideshow	Plays back images and movies automatically.	p. 92
i-Contrast	Corrects dark portions of images.	p. 99
Red-Eye Correction	Corrects red eyes in images.	p. 100
Resize	Resizes and saves images.	p. 98
Protect	Protects images and movies.	p. 96
Rotate	Rotates images and movies.	p. 97
Erase all	Erases all images and movies.	p. 97
Resume	Last seen*/Last shot	p. 112
Transition		p. 94

* Default setting

Print Menu

Item	Options/Summary	Ref. Page
Print	Displays printing screen.	p. 25
Select Images & Qty.	Selects individual images for printing.	p. 103
Select All Images	Selects all images for printing.	p. 104

Clear All Selections	Cancels all settings for printing.	p. 104
Print Settings	Sets the printing style.	p. 102

Handling Precautions

Equipment

- This camera is a high-precision electronic device. Do not drop it or subject it to strong impacts.
- Never place the camera close to magnets or motors that generate strong electromagnetic fields. Exposure to strong magnetic fields may cause malfunctions or corrupt image data.
- If water droplets have fallen or dirt is stuck on the camera or LCD monitor, wipe with a dry soft cloth or eyeglass wiper. Do not rub or apply force.
- Never use cleaners containing organic solvents to wipe the camera or LCD monitor.
- Use a commercially available blower brush to remove dust from the lens. For stubborn dirt contact the closest Canon Customer Support Help Desk as listed in your Warranty System Booklet.
- When you move the camera rapidly from cold to hot temperatures, condensation may form on the internal or external surfaces of the camera. To avoid condensation, put the camera in an airtight, resealable plastic bag and let it adjust to temperature changes slowly before removing it from the bag.
- If condensation has formed, stop using the camera immediately. Continued use may damage the camera. Remove the batteries and memory card, and wait until the moisture has completely evaporated before resuming use.

Memory Cards

- A memory card is a high-precision electronic device. Do not bend, apply force or subject it to strong impacts. Doing so may corrupt image data recorded on the memory card.
- Do not spill liquids on the memory card. Do not touch the memory card's terminals with your hands or metallic objects.
- Do not store memory cards near a TV, speakers or other devices that generate magnetic fields or static electricity. Doing so may corrupt image data recorded on the memory card.
- Do not store memory cards in hot, humid or dusty locations.

Specifications

Camera Effective Pixels	Approx. 12.1 million
Image Sensor	1/2.3-inch type CCD (Total number of pixels: Approx. 12.7 million)
Lens	6.4 (W) – 38.4 (T) mm 35mm film equivalent: 36 (W) – 216 (T) mm f/3.2 (W) – f/5.9 (T)
Digital Zoom	Approx. 4.0x (Up to approx. 24x in combination with the optical zoom)
LCD Monitor	3.0-inch type TFT LCD color monitor Approx. 230,000 dots, picture coverage 100%
AF Frame Mode	Face AiAF/Center
Focusing Range (from end of lens)	Auto, Easy: 5 cm (2.0 in.) – infinity (W)/ 50 cm (1.6 ft.) – infinity (T) Normal: 50 cm (1.6 ft.) – infinity Macro: 1 – 50 cm (0.39 in. – 1.6 ft.) (W) Infinity: 3 m (9.8 ft.) – infinity Kids&Pets: 1 m (3.3 ft.) – infinity
Shutter	Mechanical shutter and electronic shutter
Shutter Speed	1– 1/1600 sec. 15 – 1/1600 sec. (Total shutter speed range)
Image Stabilization	Lens-shift type
Metering Type	Evaluative, Center-weighted average or Spot
Exposure Compensation	±2 stops in 1/3-stop increments
ISO speed (Standard Output Sensitivity, Recommended Exposure Index)	Auto, ISO 80/100/200/400/800/1600
White Balance	Auto, Day Light, Cloudy, Tungsten, Fluorescent, Fluorescent H, Custom
Built-in Flash	Auto, On, Slow Synchro, Off * Red-eye reduction/Red-eye correction/FE Lock settings available
Built-in Flash Range	30 cm – 3.5 m (12 in. – 11.5 ft.) (W)/ 50 cm – 2.0 m (1.6 ft. – 6.6 ft.) (T)
Shooting Modes	Auto, Easy, Program AE, Portrait, Landscape, Night Snapshot, Kids&Pets, Indoor, Special scene mode*, Movie * Sunset, Night Scene, Fireworks, Long Shutter, Beach, Aquarium, Foliage, Snow, ISO3200
Continuous Shooting	Approx. 1.1 images/sec.
Self-timer	Approx. 10-sec./Approx. 2-sec. delay, FaceSelf-Timer, Custom Timer
i-Contrast	Auto/Off
Recording Media	SD memory card, SDHC memory card, MultiMediaCard, MMCplus memory card, HC MMCplus memory card
File Format	Design rule for camera file system and DPOF compliant
Data Type	Still images: Exif 2.2 (JPEG) Movies: AVI (Image data: Motion JPEG, Audio data: WAVE (Mono))
Compression	Fine, Normal

Number of Recording Pixels (Still images)	Large: 4000 x 3000 pixels Medium 1: 3264 x 2448 pixels Medium 2: 2592 x 1944 pixels Medium 3: 1600 x 1200 pixels Small: 640 x 480 pixels Widescreen: 4000 x 2248 pixels
(Movies)	640 x 480 pixels (30 frames/sec.) 640 x 480 pixels (30 frames/sec. LP) 320 x 240 pixels (30 frames/sec.)
Number of Possible Shots	Approx. 160 images (Based on CIPA standardized measurement)
Playback Function	Single Image, Easy, Movie, Index, Jump, Magnified Focus, Magnified, Slideshow
Editing Function	Erase, Protect, Rotate, Resize, i-Contrast, Red-Eye Correction
Direct Print Type	PictBridge capable
Interface	Hi-Speed USB (Dedicated connector (female) with unified type of digital, audio and video*) * mini-B compatible Video/Audio output (NTSC and PAL capable, mono audio)
Communication Settings	MTP, PTP
Power	2 AA-size alkaline batteries 2 AA-size NiMH batteries (NB-3AH sold separately)
Operating Temperatures	0 – 40 °C (32 – 104 °F)
Operating Humidity	10 – 90%
Dimensions (excluding protrusions)	101.9 x 63.5 x 31.9 mm (4.01 x 2.50 x 1.26 in.)
Weight (camera body only)	Approx. 185 g (6.53 oz.)

- All data is based on tests by Canon.
- The finished product, or exterior may differ from this report.

Index

Numerics

3.5" x 5" Size 67
3:2 Guide 111

A

AC Adapter Kit 38, 114
Accessories 36
AE Lock 80, 87
AF → Auto Focus
AF Frame 21
AF Lock 77
Aquarium (Scene Mode) 54
AV Cable 2, 95

B

Battery
  Battery and Charger Kit 36, 38
  Charge Indicator 14
  Date/Time Battery 17
  Power Saving 41
Beach (Scene Mode) 54
Black and White Images 71

C

Camera Shake 56, 111
Components Guide 40
Compression → Image Quality
Continuous Shooting 68

D

Date and Time
  Adding to Image 57
  Changing 17
  Date/Time Battery 17
  Settings 16
Date/Time → Date and Time
Default Settings 48
Deleting → Erasing
DIGITAL CAMERA Solution Disk 2, 33
Digital Tele-Converter 59
Digital Zoom 58
Direct Print Button 25, 112
Display Language 18
Display Overlay 111
DPOF 101, 102

E

Editing
  i-Contrast 99
  Red-Eye Correction 100
  Resizing (Making Images Smaller) 98
  Rotating Images 97
Enlarged Display 94
Equipment
  Default Settings 48
  Holding the Camera 11
Erasing All Images 97
Erasing Images 24
Error Messages 118
Exposure
  AE Lock 80, 87
  Correction 68
  FE Lock 81

F

Face AiAF 76
Face Selection 79
Face Self-Timer 61
Factory Settings → Default Settings
FE Lock 81
File Number 107
Fireworks (Scene Mode) 54
Flash
  Off 56
  On 64
  Slow Synchro 81
  Supplementary Flash 38
Focus
  AF Frame 21
  AF Frame Mode 76
  AF Lock 77
  AF-Point Zoom 78
  Face Selection 79
Focus Check 93
Focus Lock 74
Format → Memory Card, Formatting
Formatting (Memory Card) 49

FUNC. Menu
Basic Operations 45
List 120

G

Green Leaves/Autumn Foliage (Scene Mode) 55
Grid Lines 111

H

High Speed (ISO) 55, 69
High-Power Flash 38
Histogram 44
Household Power 114

I

i-Contrast 82, 99
Image Quality (Compression Ratio) 66
Images
Display Time 110
Editing → Editing
Erasing Images 24
Playback → View
Protect 96
Indicator 41, 44
Indoor (Scene Mode) 53
Infinity 65
Interface Cable 2, 25, 33
ISO Speed 69
ISO3200 (Scene Mode) 55

K

Kids&Pets (Scene Mode) 52

L

Lamp 40, 60, 109
Landscape (Scene Mode) 52
LCD monitor → Screen
Long Exposures 84
Long Shutter Mode (Scene Mode) 84

M

Memory Cards 15
Available Shots 15, 67
Formatting 49
Menu
Basic Operations 46
List ..... 122 – 125
Metering Mode 80
MMCplus/HC MMCplus Memory Card → Memory Cards
Mode Dial 40
Movies
Image Quality (Frame Rate) 86
Recording Pixels 86
Shooting Time 30, 86
Viewing (Playback) 31
MultiMediaCard → Memory Cards
My Colors 71

N

Night Scene (Scene Mode) 54
Night Snapshot (Scene Mode) 52
Number of Shots 14

P

Package Contents → Accessories
Personal Printing Guide 2
PictBridge 25
Playback → View
Playback Button 23
Playback With Transition Effects 94
Portrait (Scene Mode) 52
Postcard Size 67
Power Button 40
Power Saving 41
Print List (DPOF) 101
Print Settings (DPOF) 102
Printer 25, 26
Printing 25
Program AE 64

R

Recording Pixels (Image Size) 66
Red-Eye
Auto Correction 83
Correction 100
Reduction 109
Resizing (Making Images Smaller) 98
Rotating Images 97

S

SCN (Scene Mode) 53
Screen
  Display Language 18
  Information Displayed 42, 43
  Menu Operations 45, 46
  Switching the Display 42, 43
SD/SDHC Memory Card → Memory Cards
Self-Timer
  10 second Self-Timer 60
  Changing Delay and Number of Shots 73
  Face Self-Timer 61
  Two Second Self-Timer 72
Sepia Tones 71
Shooting Date and Time → Date/Time
Shooting Using a TV 72
Shooting With Macro 65
Shutter Button 19
Slideshow 92
Snow (Scene Mode) 55
Software
  DIGITAL CAMERA Solution Disk 2, 33
  Software Starter Guide 2
  Transferring Images to a Computer 32
Sound 47
Strap 2, 11
Sunset (Scene Mode) 54
Supplementary Flash 38

T

Terminal 25, 34, 95
Tone (White Balance) 70
Troubleshooting 115

V

Video → Movies
Viewing (Playback)
  Enlarged Display 94
  Index Display 90
  Single Image Playback 23
  Slideshow 92
  Viewing Images on a TV 95
Viewing Images on a TV 95

W

White Balance 70
Wide (Recording Pixels) 66, 67
Wrist Strap → Strap

Z

Zoom 20, 29, 58

MEMO

Trademark Acknowledgments

- The SDHC logo is a trademark.

Disclaimer

- Reprinting, transmitting, or storing in a retrieval system any part of this guide without the permission of Canon is prohibited.
- Canon reserves the right to change the contents of this guide at any time without prior notice.
- Illustrations and screenshots in this guide may differ slightly from the actual equipment.
- Every effort has been made to ensure that the information contained in this guide is accurate and complete. However, if you notice any errors or omissions, please contact the Canon customer service center indicated on the customer support list included with the product.
- The above items notwithstanding, Canon accepts no liability for damages due to mistaken operation of the products.

© CANON INC. 2009